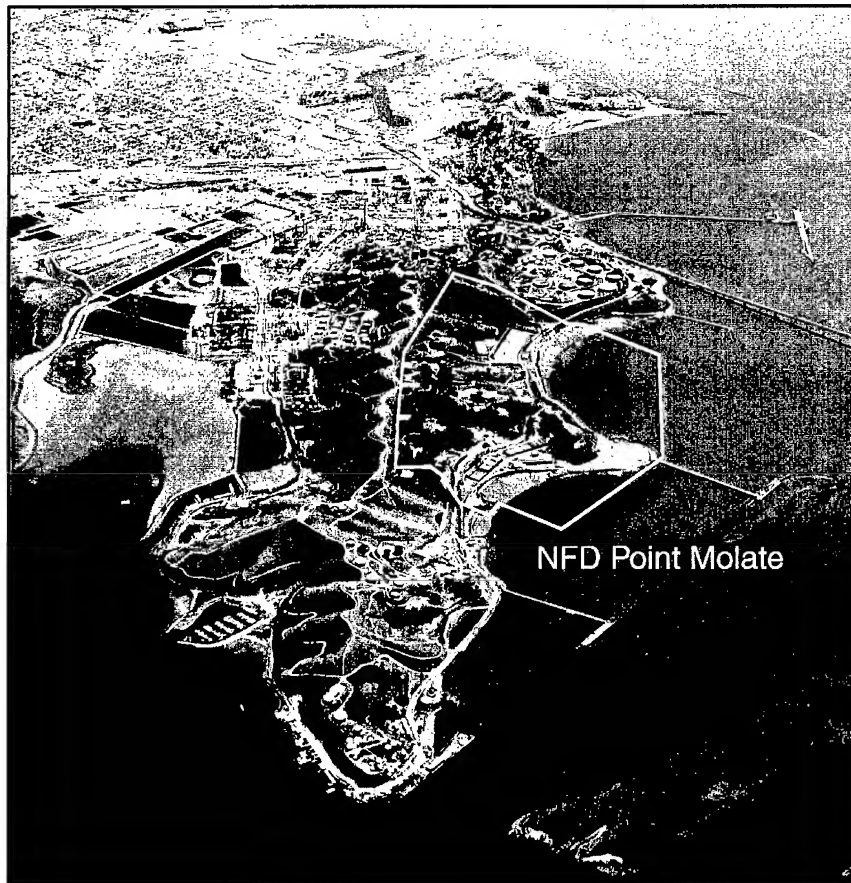


**Draft**

**Environmental Impact Statement/Environmental Impact Report  
For the Disposal and Reuse of  
Fleet and Industrial Supply Center  
Naval Fuel Depot Point Molate**



**May 2001**

**Southwest Division  
Naval Facilities Engineering Command  
and  
City of Richmond**

**DISTRIBUTION STATEMENT A**  
Approved for Public Release  
Distribution Unlimited

**20010523 157**



**DEPARTMENT OF THE NAVY**  
SOUTHWEST DIVISION  
NAVAL FACILITIES ENGINEERING COMMAND  
1220 PACIFIC HIGHWAY  
SAN DIEGO, CA 92132-5190

**Notice**

**Subject: Public Hearing and the Draft Environmental Impact Statement/  
Environmental Impact Report for the Disposal and Reuse of Fleet and  
Industrial Supply Center, Naval Fuel Depot Point Molate (Richmond,  
California)**

Fleet and Industrial Supply Center, Naval Fuel Depot Point Molate (NFD Point Molate) was closed pursuant to the Defense Base Closure and Realignment Act of 1990, 10 United States Code section 2687, note at 582-606, and subsequent Defense Authorization Acts, which established a process to close and realign military bases. NFD Point Molate was operationally closed on September 30, 1998. The Secretary of the Navy has the authority to convey NFD Point Molate to the City of Richmond for community reuse.

The Department of the Navy (Navy) and the City of Richmond (City) have prepared a joint Draft Environmental Impact Statement/Environmental Impact Report (Draft EIS/EIR) for the disposal and reuse of NFD Point Molate pursuant to Section 102(2)(c) of the National Environmental Policy Act of 1969 as implemented by the Council of Environmental Quality regulations, 40 CFR Parts 1500-1508, and the California Environmental Quality Act, Public Resources Code Section 21000 et seq., as amended.

The proposed Federal action discussed in the Draft EIS/EIR is the disposal of Federal surplus property at NFD Point Molate. The document also considers the potential significant impacts of three proposed community reuse alternatives, each emphasizing various types of development, such as residential, commercial, industrial, open space, and recreation. A fourth alternative, no action, assumes no disposal of property and the retention of NFD Point Molate by Navy in caretaker status. Under the No Action alternative, the site would not be reused or redeveloped. Environmental cleanup would continue and be completed.

Copies of the Draft EIS/EIR are being distributed to agencies, organizations, and individuals thought to have an interest in the proposed action. A limited number of copies are available upon request. The Draft EIS/EIR is available for review at the following locations in Richmond:

- Richmond Public Library, Main Branch, 325 Civic Center Plaza
- Richmond Public Library, West Side Branch, 135 Washington Ave

A public hearing will be held to receive oral and written comments on the Draft EIS/EIR. Any interested party may appear at the hearing and give testimony regarding the accuracy and completeness of the Draft EIS/EIR. The meeting will be held at 6:00 PM on June 20, 2001, at the City of Richmond Council Chambers, located at 2600 Barrett Avenue, Richmond, California.



Agencies, public groups, and individuals are invited to submit written comments on the Draft EIS/EIR during the 45-day review period. Written correspondence must be received no later than July 2, 2001, and should be sent to the following:

Southwest Division  
Naval Facilities Engineering Command  
1230 Columbia Street, Suite 1100                      and  
San Diego, CA 92101  
Attn: Mr. Robert Montana  
Phone: 619/532-0942  
Fax: 619/532-0940

City of Richmond  
Redevelopment Agency  
330 25<sup>th</sup> Street  
Richmond, CA 94804  
Attn: Mr. Gary Hembree  
Phone: 510/307-8140  
Fax: 510/307-8149

For further information concerning environmental review of the disposal and proposed reuse of NFD Point Molate, contact Mr. Robert Montana of the Navy or Mr. Gary Hembree of the Richmond Redevelopment Agency at the addresses above. Thank you for your participation in this process.

**DRAFT**  
**ENVIRONMENTAL IMPACT STATEMENT/ENVIRONMENTAL IMPACT REPORT**  
**FOR THE DISPOSAL AND REUSE OF**  
**FLEET AND INDUSTRIAL SUPPLY CENTER, NAVAL FUEL DEPOT POINT MOLATE**  
**RICHMOND, CALIFORNIA**

Lead Agency for EIS: U.S. Department of the Navy  
Lead Agency for EIR: City of Richmond, California  
Title for Proposed Action: Disposal and Reuse of Fleet and Industrial Supply Center,  
Naval Fuel Depot Point Molate  
Affected Jurisdiction: City of Richmond, California  
Designation: Environmental Impact Statement/Environmental Impact Report  
State Clearinghouse #: TBD

**ABSTRACT**

Fleet and Industrial Supply Center, Naval Fuel Depot Point Molate (NFD Point Molate) was closed pursuant to the Defense Base Closure and Realignment Act of 1990 (DBCRA), 10 United States Code (U.S.C.) § 2687, note at 582-606, and subsequent Defense Authorization Acts, which established a process to close and realign military bases.

This Draft Environmental Impact Statement/Environmental Impact Report has been prepared in accordance with the National Environmental Policy Act of 1969 (NEPA), as amended, 42 U.S.C. §§ 4321-4370d; the Council on Environmental Quality regulations on implementing NEPA, 40 Code of Federal Regulations Parts 1500-1508 (1998); Department of the Navy Environmental and Natural Resources Program Manual (OPNAVINST 5090.1B, CH-2, 1999); and the California Environmental Quality Act of 1970 (CEQA), California Public Resources Code Sections 21000-21178.1 (West 1996 & Supp. 1999) statutes and guidelines. This document discusses the potentially significant environmental impacts of disposal and community reuse of the NFD Point Molate property. The Federal action subject to NEPA is the Navy disposal of Federal surplus property and structures out of Federal ownership and potential community reuse of the property. The local action subject to CEQA is reuse of the property in accordance with the Draft *Point Molate Reuse Plan*, which was adopted by the Richmond City Council in April 1997. Three community reuse alternatives are evaluated: Residential/Commercial (Alternative 1), Industrial/Commercial (Alternative 2), and Recreation/Commercial (Alternative 3). A No Action Alternative is also evaluated.

This document discusses potential environmental consequences related to land use; visual resources; socioeconomic; public services; cultural resources; biological resources; water resources; geology and soils; transportation, traffic and circulation; air quality; noise; utilities; and hazardous materials and waste.

The Residential/Commercial alternative (Alternative 1) would have one significant unmitigable land use impact. The Industrial/Commercial alternative (Alternative 2) and the Recreation/Commercial alternative (Alternative 3) would not have any significant unmitigable impacts. The mitigation measures identified in this document would reduce all other environmental impacts to acceptable levels. In addition, as required by Executive Order 13045, this document identifies potential disproportionate health and safety risks to children at NFD Point Molate; these potential risks would be greatest under Alternative 1 because of proposed residential development.

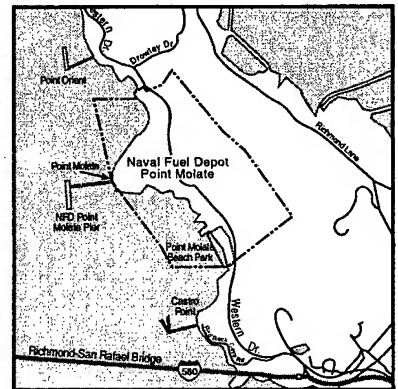
**Comments on this document should be sent to:**

Southwest Division  
Naval Facilities Engineering Command -and-  
1230 Columbia Street, Suite 1100  
San Diego, CA 92101  
Attn: Mr. Robert Montana  
Phone: (619) 532-0942  
Fax: (619) 532-0940

City of Richmond  
Redevelopment Agency  
330 25<sup>th</sup> Street  
Richmond, CA 94804  
Attn: Mr. Gary Hembree  
Phone: (510) 307-8140  
Fax: (510) 307-8149

---

# Table of Contents



---

## TABLE OF CONTENTS

### SECTION

### PAGE

---

#### ABSTRACT

#### ABBREVIATIONS AND ACRONYMS ..... xi

#### EXECUTIVE SUMMARY..... ES-1

ES.1	Introduction .....	ES-1
ES.2	Purpose and Need For Action.....	ES-4
ES.3	Public Involvement Process.....	ES-5
	ES.3.1 Introduction.....	ES-5
	ES.3.2 Scoping Process.....	ES-5
	ES.3.3 Pubic Review.....	ES-6
ES.4	Alternatives .....	ES-7
	ES.4.1 Navy Disposal Action.....	ES-7
	ES.4.2 Community Reuse Alternatives.....	ES-7
ES.5	Affected Environment.....	ES-13
ES.6	Environmental Consequences.....	ES-14
ES.7	Other Considerations and Federal Executive Orders .....	ES-38
	ES.7.1 Cumulative Impacts .....	ES-38
	ES.7.2 Significant Unmitigable Adverse Impacts Effects.....	ES-38
	ES.7.3 Short-Term Uses and Long-Term Productivity.....	ES-38
	ES.7.4 Irreversible/or Irretrievable Commitments of Resources.....	ES-39
	ES.7.5 Growth-Inducing Impacts (CEQA Only) .....	ES-39
	ES.7.6 Environmental Justice .....	ES-40
	ES.7.7 Protection of Children from Environmental Health Risks and Safety Risks .....	ES-40
ES.8	Agency Coordination .....	ES-41
ES.9	Areas of Controversy .....	ES-41

#### 1 PURPOSE AND NEED ..... 1-1

1.1	Federal Action .....	1-1
1.2	Local Action.....	1-2
1.3	Location and History.....	1-2
1.4	Document Organization.....	1-5
1.5	Related Processes and Documentation .....	1-5
	1.5.1 Navy Disposal.....	1-5
	1.5.2 Property Screening .....	1-5
	1.5.3 Methods of Conveyance .....	1-6
	1.5.4 Related Studies.....	1-6
1.6	Public Involvement Process.....	1-6
	1.6.1 Introduction.....	1-6
	1.6.2 Scoping Process.....	1-7
	1.6.3 Summary of Scoping Issues .....	1-8
	1.6.4 Public Review.....	1-10

---

**TABLE OF CONTENTS** *(continued)*

<b>SECTION</b>		<b>PAGE</b>
<b>2</b>	<b>ALTERNATIVES, INCLUDING THE PROPOSED ACTION .....</b>	<b>2-1</b>
2.1	Introduction .....	2-1
2.2	Disposal Alternatives .....	2-2
2.3	Development of the Community Reuse Alternatives .....	2-2
2.3.1	Introduction.....	2-2
2.3.2	Community Reuse Planning .....	2-2
2.4	Description of Alternatives.....	2-3
2.4.1	Overview .....	2-3
2.4.2	Alternative 1: Residential/Commercial.....	2-8
2.4.3	Alternative 2: Industrial/Commercial.....	2-10
2.4.4	Alternative 3: Recreation/Commercial .....	2-10
2.4.5	No Action Alternative.....	2-13
2.5	Alternatives Considered But Eliminated.....	2-13
2.6	Project Approval Requirements.....	2-14
2.7	Environmentally Preferable (NEPA)/Environmentally Superior (CEQA) Alternative .....	2-15
2.8	Comparison of Alternatives .....	2-15
<b>3</b>	<b>AFFECTED ENVIRONMENT .....</b>	<b>3-1</b>
3.1	Land Use .....	3-1
3.1.1	NFD Point Molate.....	3-1
3.1.2	Surrounding Land Use .....	3-5
3.1.3	Plans and Policies .....	3-18
3.2	Visual Resources .....	3-31
3.2.1	Visual Character of NFD Point Molate .....	3-31
3.2.2	NFD Point Molate Viewshed .....	3-34
3.2.3	Plans and Policies .....	3-38
3.3	Socioeconomics .....	3-41
3.3.1	Population .....	3-41
3.3.2	Employment and Income .....	3-42
3.3.3	Housing.....	3-42
3.3.4	Schools .....	3-42
3.3.5	Plans and Policies .....	3-43
3.4	Public Services.....	3-46
3.4.1	Police and Security Services.....	3-46
3.4.2	Fire Protection and Emergency Medical Response Services.....	3-46
3.4.3	Plans and Policies .....	3-47
3.5	Cultural Resources.....	3-50
3.5.1	Historical and Archeological Setting .....	3-50
3.5.2	Cultural Resources Inventory and Evaluation .....	3-52
3.5.3	Plans and Policies .....	3-56
3.6	Biological Resources .....	3-59
3.6.1	Background Information .....	3-59
3.6.2	Vegetation Communities.....	3-59
3.6.3	Fish and Wildlife.....	3-59

---

**TABLE OF CONTENTS** *(continued)*

SECTION	PAGE
3.6.4 Sensitive Species .....	3-60
3.6.5 Sensitive Habitats .....	3-61
3.6.6 Plans and Policies .....	3-63
3.7 Water Resources.....	3-66
3.7.1 Groundwater.....	3-66
3.7.2 Surface Water.....	3-67
3.7.3 Tide and Wave Runup.....	3-68
3.7.4 Plans and Policies .....	3-68
3.8 Geology and Soils .....	3-71
3.8.1 Physiography .....	3-71
3.8.2 Topography .....	3-71
3.8.3 Geologic Materials.....	3-71
3.8.4 Geologic Hazards .....	3-74
3.8.5 Seismic Hazards.....	3-74
3.8.6 Plans and Policies .....	3-76
3.9 Transportation, Traffic, and Circulation.....	3-79
3.9.1 Existing Transportation System.....	3-79
3.9.2 Existing Traffic Conditions.....	3-85
3.9.3 Future Baseline Traffic Conditions.....	3-94
3.9.4 Other Transportation Modes .....	3-96
3.9.5 Plans and Policies .....	3-101
3.10 Air Quality .....	3-105
3.10.1 Climate and Meteorology.....	3-105
3.10.2 Ambient Air Quality Standards.....	3-105
3.10.3 Existing Air Quality Conditions in the City of Richmond .....	3-109
3.10.4 Plans and Policies .....	3-113
3.11 Noise.....	3-117
3.11.1 Noise Terminology.....	3-117
3.11.2 Existing Noise Conditions .....	3-117
3.11.3 Plans and Policies .....	3-119
3.12 Utilities .....	3-123
3.12.1 Water Distribution System .....	3-123
3.12.2 Sanitary Sewer and Industrial Wastewater System.....	3-125
3.12.3 Storm Water System.....	3-127
3.12.4 Electrical System .....	3-127
3.12.5 Telecommunication System .....	3-127
3.12.6 Solid Waste Management.....	3-130
3.12.7 Plans and Policies .....	3-130
3.13 Hazardous Materials and Waste.....	3-133
3.13.1 Navy Operations.....	3-133
3.13.2 Summary of Contamination and the IRP Process .....	3-133
3.13.3 Environmental Compliance Program .....	3-137
3.13.4 Plans and Policies .....	3-141

---

**TABLE OF CONTENTS** *(continued)*

SECTION	PAGE
4 ENVIRONMENTAL CONSEQUENCES .....	4-1
4.1 Land Use .....	4-3
4.1.1 Navy Disposal Action .....	4-13
4.1.2 Community Reuse Alternatives .....	4-13
4.1.3 No Action Alternative .....	4-17
4.2 Visual Resources .....	4-18
4.2.1 Navy Disposal Action .....	4-21
4.2.2 Community Reuse Alternatives .....	4-21
4.2.3 No Action Alternative .....	4-21
4.3 Socioeconomics .....	4-22
4.3.1 Navy Disposal Action .....	4-24
4.3.2 Community Reuse Alternatives .....	4-24
4.3.3 No Action Alternative .....	4-25
4.4 Public Services .....	4-26
4.4.1 Navy Disposal Action .....	4-26
4.4.2 Community Reuse Alternatives .....	4-27
4.4.3 No Action Alternative .....	4-28
4.5 Cultural Resources .....	4-29
4.5.1 Navy Disposal Action .....	4-31
4.5.2 Community Reuse Alternatives .....	4-31
4.5.3 No Action Alternative .....	4-33
4.6 Biological Resources .....	4-34
4.6.1 Navy Disposal Action .....	4-37
4.6.2 Community Reuse Alternatives .....	4-37
4.6.3 No Action Alternative .....	4-39
4.7 Water Resources .....	4-40
4.7.1 Navy Disposal Action .....	4-42
4.7.2 Community Reuse Alternatives .....	4-42
4.7.3 No Action Alternative .....	4-43
4.8 Geology and Soils .....	4-44
4.8.1 Navy Disposal Action .....	4-46
4.8.2 Community Reuse Alternatives .....	4-46
4.8.3 No Action Alternative .....	4-47
4.9 Transportation, Traffic, and Circulation .....	4-48
4.9.1 Navy Disposal Action .....	4-57
4.9.2 Community Reuse Alternatives .....	4-58
4.9.3 No Action Alternative .....	4-63
4.10 Air Quality .....	4-64
4.10.1 Navy Disposal Action .....	4-69
4.10.2 Community Reuse Alternatives .....	4-69
4.10.3 No Action Alternative .....	4-72
4.11 Noise .....	4-73
4.11.1 Navy Disposal Action .....	4-75
4.11.2 Community Reuse Alternatives .....	4-75
4.11.3 No Action Alternative .....	4-77

---

**TABLE OF CONTENTS** *(continued)***SECTION****PAGE**

---

4.12	Utilities .....	4-78
4.12.1	Navy Disposal Action .....	4-80
4.12.2	Community Reuse Alternatives.....	4-81
4.12.3	No Action Alternative.....	4-85
4.13	Hazardous Materials and Waste.....	4-86
4.13.1	Navy Disposal Action .....	4-89
4.13.2	Community Reuse Alternatives.....	4-89
4.13.3	No Action Alternatives .....	4-91
5	OTHER CONSIDERATIONS AND FEDERAL EXECUTIVE ORDERS .....	5-1
5.1	Cumulative Impacts .....	5-1
5.1.1	Cumulative Assumptions.....	5-1
5.1.2	Reasonably Foreseeable Projects .....	5-1
5.1.3	Potential Cumulative Impacts .....	5-2
5.2	Significant Unmitigable Adverse Impacts.....	5-4
5.3	Short-Term Uses and Long-Term Productivity .....	5-4
5.4	Irreversible/Irretrievable Commitments of Resources.....	5-5
5.5	Growth-Inducing Impacts (CEQA Only).....	5-5
5.6	Environmental Justice .....	5-6
5.6.1	Introduction.....	5-6
5.6.2	Criteria .....	5-7
5.6.3	Minority Population and Low-Income Population Overview .....	5-7
5.6.4	Potential Disproportionate Impacts on Minority Populations or Low-Income Populations.....	5-7
5.7	Protection of Children from Environmental Health Risks and Safety Risks .....	5-8
6	CONSULTATION AND COORDINATION.....	6-1
6.1	Scoping.....	6-1
6.2	Points of Contact.....	6-1
6.3	Personal Communications .....	6-2
6.4	List of Preparers .....	6-3
6.5	Distribution List .....	6-5
7	REFERENCES.....	7-1



# LIST OF APPENDICES

## APPENDIX

## PAGE

### A Documentation of Homeless Assistance Screening

Letter of Approval, U.S. Department of Housing and Urban Development .....	A-1
Cooperation Agreement between Point Molate Local Reuse Authority and the County	
Homeless Collaborative.....	A-2

### B Public Participation

October 1997 Information Sheet from Public Scoping Meeting .....	B-1
Notice of Intent-Federal Register, September 15, 1997 .....	B-3
Public Notice-Public Scoping Meeting, September 16, 1997 .....	B-5
List of Attendees-Public Scoping Hearing, October 1, 1997 .....	B-8
Letters Received During Public Scoping Period .....	B-9

### C Excerpt, Point Molate Reuse Plan

Point Molate Draft Reuse Plan Excerpt: Reuse Plan Components .....	C-1
--	-----

### D Table of Reuse Alternatives

Table D.1: Distribution of Uses by Alternatives Based on the <i>Point Molate Reuse Plan</i> .....	D-1
---	-----

### E Supporting Technical Information

#### E.1 Visual Resources

Visual Character Photo Locations .....	E-1
Existing Conditions Photos .....	E-2
Traffic Photos .....	E-15

#### E.2 Cultural Resources

Table E.2-1: Summary of Cultural Resources at NFD Point Molate .....	E-19
Table E.2-2: Summary of Archeological Studies for NFD Point Molate .....	E-22
Table E.2-3: Summary of Historic Architectural Resource Studies at NFD Point Molate .....	E-23
Table E.2-4: Record of Native American Consultations .....	E-23
Table E.2-5: Assessments of Recorded Cultural Properties at NFD Point Molate for Significance .....	E-24
Memorandum of Agreement .....	E-25

#### E.3 Biological Resources

Table E.3-1: Animal Species Potentially Occurring at NFD Point Molate .....	E-39
Table E.3-2: Threatened and Endangered Animal Species Potentially Occurring at NFD Point Molate .....	E-41
Table E.3-3: Other Sensitive Species Found Within a One-Mile Radius of NFD Point Molate .....	E-42
Table E.3-4: Plant Species Detected at NFD Point Molate.....	E-43

#### E.4 Transportation, Traffic, and Circulation

Figure E.4-1: Existing Traffic Volumes (AM/PM) .....	E-53
Figure E.4-2: Alternative 1 Project Trips.....	E-54
Figure E.4-3: Alternative 2 Project Trips.....	E-55
Figure E.4-4: Alternative 3 Project Trips.....	E-56
Figure E.4-5: Year 2010 No Action Alternative Traffic Volumes .....	E-57
Figure E.4-6: Year 2020 No Action Alternative Traffic Volumes .....	E-58
Figure E.4-7: Year 2010 Plus Alternative 1 Traffic Volumes.....	E-59
Figure E.4-8: Year 2010 Plus Alternative 2 Traffic Volumes .....	E-60

---

**TABLE OF CONTENTS** *(continued)***SECTION****PAGE**

---

Figure E.4-9: Year 2010 Plus Alternative 3 Traffic Volumes .....	E-61
Figure E.4-10: Year 2020 Plus Alternative 1 Traffic Volumes (at Full Build-out) .....	E-62
Figure E.4-11: Year 2020 Plus Alternative 2 Traffic Volumes (at Full Build-out) .....	E-63
Figure E.4-12: Year 2020 Plus Alternative 3 Traffic Volumes (at Full Build-out) .....	E-64
<b>E.5 Air Quality</b>	
E.5.1 Estimation of Traffic-Related Criteria Air Pollutants .....	E-65
E.5.2 Estimation of Traffic-Related Carbon Monoxide Concentrations .....	E-68
Table E.5-1: Summary of Average Weekday Traffic-Related Emissions from Vehicle Travel Associated with Alternative 1 .....	E-71
Table E.5-2: Summary of Average Weekday Traffic-Related Emissions from Vehicle Travel Associated with Alternative 2 .....	E-72
Table E.5-3: Summary of Average Weekday Traffic-Related Emissions from Vehicle Travel Associated with Alternative 3 .....	E-73
Record of Non-Applicability (RONA) .....	E-75
<b>E.6 Surplus Determination</b> .....	E-77
<b>F Restoration Advisory Board and Community Relations Plan Summary</b>	
F.1 Restoration Advisory Board .....	F-1
F.2 Community Relations Plan Summary .....	F-3

# LIST OF FIGURES

## FIGURE

## PAGE

ES-1	Area Map of NFD Point Molate .....	ES-2
ES-2	Local Map of NFD Point Molate .....	ES-3
ES-3	Conceptual Land Uses for the Three Community Reuse Alternatives .....	ES-11
1.2-1	Area Map of NFD Point Molate .....	1-3
1.2-2	Local Map of NFD Point Molate .....	1-4
2.2-1	Conceptual Land Uses for Community Reuse Alternative 1 .....	2-9
2.2-2	Conceptual Land Uses for Community Reuse Alternative 2 .....	2-11
2.2-3	Conceptual Land Uses for Community Reuse Alternative 3 .....	2-12
2.8-1	Conceptual Land Uses for the Three Community Reuse Alternatives .....	2-16
3.1-1	Land Uses at NFD Point Molate.....	3-2
3.1-2	Existing Land Ownership Surrounding the NFD Point Molate Property .....	3-3
3.1-3	Surrounding Land Uses Photo Locations .....	3-7
3.1-4	Land Uses to the South of NFD Point Molate .....	3-8
3.1-5	Land Uses to the South of NFD Point Molate (cont.) .....	3-9
3.1-6	Section through the San Pablo Peninsula.....	3-10
3.1-7	Land Uses to the North of the NFD Point Molate Property .....	3-11
3.1-8	Land Uses to the North of the NFD Point Molate property (cont.).....	3-12
3.1-9	Accidental Release Endpoints for Ammonia.....	3-15
3.1-10	Accidental Release Endpoints for Flammables and Oleum .....	3-16
3.1-11	Bay Trail Alignment in the Vicinity of the NFD Point Molate Property .....	3-21
3.1-12	City of Richmond Land Use Designations (Upon Disposal).....	3-23
3.1-13	West Shoreline Zoning Designations.....	3-28
3.2-1	Visual Character of the NFD Point Molate Property.....	3-32
3.2-2	Looking Northeast at Northern Area from the End of the NFD Point Molate Pier .....	3-33
3.2-3	Looking East at Southern Area from the End of the NFD Point Molate Pier .....	3-35
3.2-4	Representative Viewsheds from Two Locations at NFD Point Molate.....	3-36
3.5-1	Winehaven Historic District .....	3-54
3.6-1	Location of Sensitive Habitats at the NFD Point Molate Property .....	3-62
3.8-1	Fault Zone and Individual Fault Location Map.....	3-72
3.8-2	Geologic Map of NFD Point Molate .....	3-73
3.9-1	Regional Highways and Local Roadways in the City of Richmond .....	3-80
3.9-2	NFD Point Molate Access Routes .....	3-81
3.9-3	Western Drive, San Pablo Peninsula .....	3-82
3.9-4	Point Molate/Western Drive Ramps at I-580.....	3-84
3.9-5	Existing Intersection Configurations .....	3-87
3.9-6	Existing Freeway Mainline Segments.....	3-88
3.9-7	Existing Traffic Volumes (AM/PM).....	3-89
3.9-8	Transit Routes in the ROI.....	3-97
3.9-9	San Francisco Bay Area Ferry Terminal Map.....	3-99
3.11-1	Typical A-Weighted Sound Levels of Common Sounds .....	3-118
3.11-2	State of California Land Use Noise Compatibility Matrix.....	3-120
3.12-1	Water Distribution System at NFD Point Molate .....	3-124
3.12-2	Sanitary, Industrial Wastewater and Storm Water Sewer Systems at NFD Point Molate .....	3-126
3.12-3	Location of Richmond Municipal Sewer District Treatment Plant.....	3-128
3.12-4	Electrical System at NFD Point Molate .....	3-129

---

**LIST OF FIGURES** *(continued)***FIGURE****PAGE**

---

3.13-1	IR Site Locations at NFD Point Molate.....	3-135
3.13-2	Known Hydrocarbon Spills and Releases at NFD Point Molate .....	3-139
3.13-3	Areas Investigated in the Phase II EBS Investigation.....	3-142
4.1-1	Existing and Conceptual Community Land Uses by Alternative for the NFD Point Molate Property .....	4-4
4.1-2	Alternate Release Scenario for Ammonia and Alternative 1 Land Uses .....	4-10
4.9-1	Trip Distribution for NFD Point Molate .....	4-51

# LIST OF TABLES

TABLE	PAGE
ES-1 Land Uses Under NFD Point Molate Reuse Alternatives.....	ES-9
ES-2 Summary of Significant Environmental Impacts and Mitigations under NEPA .....	ES-15
ES-3 Summary of Significant Environmental Impacts and Mitigations under CEQA .....	ES-25
2.2-1 Land Uses Under NFD Point Molate Reuse Alternatives.....	2-6
2.8-1 Summary of Significant Environmental Impacts and Mitigations under NEPA .....	2-17
2.8-2 Summary of Significant Environmental Impacts and Mitigations under CEQA .....	2-27
3.1-1 RMP Modeling for Chevron Refinery and General Chemical .....	3-17
3.1-2 Zoning Districts in the West Shoreline Area .....	3-29
3.3-1 1990 Racial Composition of the ROI and San Francisco Bay Area Population.....	3-41
3.3-2 School Capacities and Enrollments.....	3-43
3.9-1 CCTA LOS Criteria for Signalized Intersections .....	3-90
3.9-2 Existing Volume-to-Capacity Ratios and LOS at Intersections.....	3-90
3.9-3 LOS Criteria for Freeway Ramps .....	3-91
3.9-4 Existing Ramp Density and LOS on Freeway Interchange Ramps .....	3-92
3.9-5 LOS Criteria for Freeway Segments .....	3-93
3.9-6 Existing Traffic Volumes and LOS on Freeway Segments .....	3-93
3.9-7 Average Daily Traffic Volumes on Western Drive.....	3-94
3.9-8 Future 2020 Baseline Intersection Conditions .....	3-95
3.9-9 Future 2020 Baseline Ramp Conditions .....	3-95
3.9-10 Future 2020 Baseline Freeway Segment Conditions.....	3-96
3.10-1 Ambient Air Quality Standards Applicable in California .....	3-106
3.10-2 San Francisco Bay Area Air Quality Attainment Status .....	3-108
3.10-3 Summary of Air Quality Monitoring Data for the Richmond 13 <sup>th</sup> Street Monitoring Station.....	3-110
3.10-4 Summary of Air Quality Monitoring Data for the Richmond San Pablo – El Portal Monitoring Station .....	3-111
3.11-1 Exterior Noise Limits, City of Richmond .....	3-122
4.1-1 Land Use Acreages for the Reuse Alternatives.....	4-5
4.1-2 Acutely Hazardous Materials for Which NFD Point Molate is Within RMP Accidental Release Endpoint .....	4-14
4.3-1 Alternative 1: School Capacities and Enrollments.....	4-23
4.9-1 Trip Generation Estimates for Alternative 1-Residential/Commercial .....	4-49
4.9-2 Trip Generation Estimates for Alternative 2-Industrial/Commercial .....	4-49
4.9-3 Trip Generation Estimates for Alternative 3-Recreation/Commercial .....	4-50
4.9-4 Level of Service at Intersections at Full Build-out .....	4-52
4.9-5 Level of Service on Freeway Ramps at Full Build-out .....	4-52
4.9-6 Level of Service on Freeway Segments at Full Build-out .....	4-53
4.10-1 Comparison of Average Daily Vehicle Miles Traveled and Estimated Emission Rates.....	4-65
4.11-1 Noise Levels at 50 Feet from Roadway Centerline.....	4-73

---

## ABBREVIATIONS AND ACRONYMS

---

AB	California State Assembly Bill
ABAG	Association of Bay Area Governments
AC Transit	Alameda – Contra Costa Transit District
ACHP	Advisory Council on Historic Preservation
ACM	asbestos-containing materials
AHERA	Asbestos Hazard Emergency Response Act
AIHA	American Industrial Hygiene Association
ARPA	Archeological Resources Protection Act
ARS	alternative release scenario
AST	Aboveground Storage Tank
Association	California Wine Association
ATC	Authority to Construct
BAAQMD	Bay Area Air Quality Management District
BCP	BRAC Cleanup Plan
BART	Bay Area Rapid Transit
Bay	San Francisco Bay
Bay Plan	<i>San Francisco Bay Plan</i>
bbl	barrels
B.C.E.	Before Common Era
BCDC	San Francisco Bay Conservation and Development Commission
BCP	BRAC Cleanup Plan
bgs	below ground surface
BMP	Best management practice
BRAC	Base Realignment and Closure
BTEX	benzene, toluene, ethylbenzene, and xylenes
CAA	Clean Air Act
CAC	Citizen's Advisory Committee
CalARP	California Accidental Release Prevention Program
CAL EPA	California Environmental Protection Agency
CAL OSHA	California Occupational Safety and Health Administration
Cal. Pub. Res.	California Public Resources
Caltrans	California Department of Transportation
CALWA	California Wine Association
CAP	Clean Air Plan/Corrective Action Plan
CAPCOA	California Air Pollution Control Officers Association
CARB	California Air Resources Board
C.C.R.	California Code of Regulations
CCTA	Contra Costa Transportation Authority
CDFG	California Department of Fish and Game
CDMG	California Division of Mines and Geology
CEQ	Council on Environmental Quality
CEQA	California Environmental Quality Act
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
C.F.R.	Code of Federal Regulations
Chevron	Chevron USA, Incorporated
City	City of Richmond
cm	centimeter
CNEL	Community Noise Equivalent Level
CNPS	California Native Plant Society

---

## ABBREVIATIONS AND ACRONYMS *(continued)*

---

Committee	Blue Ribbon Advisory Committee
Commission	California Historical Resources Commission
CPGCC	Chemical Plant General Chemical Corporation
CRHR	California Register of Historic Resources
CRP	Community Relations Plan
CWA	Clean Water Act
CZMA	Coastal Zone Management Act
dB	decibel
dba	A-weighted decibel scale
DBCRA	Defense Base Closure and Realignment Act
DOD	Department of Defense
Draft Reuse Plan	City of Richmond Draft <i>Point Molate Reuse Plan</i>
DTSC	Department of Toxic Substances Control
EB	eastbound
EBMUD	East Bay Municipal Utility District
EBRPD	East Bay Regional Park District
EBS	Environmental Baseline Survey
EE/CA	Engineering Evaluation/Cost Analysis
EIR	Environmental Impact Report
EIS	Environmental Impact Statement
EIS/EIR	Environmental Impact Statement/Environmental Impact Report
E.O.	Executive Order
EPCRA	Emergency Planning and Community Right-to-Know Act
ERPG	Emergency Response Planning Guidelines
ESA	Endangered Species Act
FAR	floor-area ratio
Fed. Reg.	Federal Register
FISC	Fleet Industrial Supply Center
FPALDR	Fuel Product Action Level Development Report
FPMR	Federal Property Management Regulations
General Plan	<i>City of Richmond General Plan</i>
gpd	gallons per day
gpm	gallons per minute
ha	hectare or hectares
HABS	Historic American Building Survey
HCM	Highway Capacity Manual
HLA	Harding Lawson Associates
HUD	U.S. Department of Housing and Urban Development
HWCL	Hazardous Waste Control Law
I-80	Interstate 80
I-580	Interstate 580
IR	Installation Restoration
IRP	Installation Restoration Program
ITE	Institute of Transportation Engineers
kg	kilogram
km	kilometers
kV	kilovolt
lbs	pounds
LBP	lead-based paint
Leq	noise equivalent level

---

## ABBREVIATIONS AND ACRONYMS *(continued)*

---

Ldn	Day-Night Average Sound Level
lpd	liters per day
lpm	Liters per minute
LOS	Level of Service
LRA	Local Redevelopment Authority
m	meters
m <sup>2</sup>	square meters
MCL	Maximum Contaminant Level
µg/m <sup>3</sup>	micrograms per cubic meter
mg/kg	milligrams per kilogram
mgd	million gallons per day
mld	million liters per day
MLLW	mean lower low water
MOA	Memorandum of Agreement
mph	miles per hour
MSL	mean sea level
MTC	Metropolitan Transportation Commission
NA	not applicable
NAAQS	National Ambient Air Quality Standards
NAGPRA	Native American Graves Protection and Repatriation Act
Navy	Department of the Navy
NCP	National Contingency Plan
NEESA	Navy Energy and Environmental Support Activity
NEPA	National Environmental Policy Act of 1969
NESHAP	National Emission Standards for Hazardous Air Pollutants
NFD	Naval Fuel Depot
NFD Point Molate	Fleet Industrial Supply Center, Naval Fuel Depot Point Molate
NGVD	National Geodetic Vertical Datum
NHPA	National Historic Preservation Act
NMFS	National Marine Fisheries Service
NOD	Notice of Determination
NOI	Notice of Intent
NOP	Notice of Preparation
NO <sub>x</sub>	Nitrogen Oxides
NPDES	National Pollutant Discharge Elimination System
NPL	National Priorities List
NPS	National Park Service
NRHP	National Register of Historic Places
OPNAVINST	U.S. Navy Operational Naval Instructions
ORS	oil reclamation system
OSHA	Occupational Safety and Health Administration
PA	Preliminary Assessment
PAH	Polynuclear Aromatic Hydrocarbons
PCB	polychlorinated biphenyl
pc/mi/lane	passenger cars per mile per lane
pcphpl	passenger cars per hour per lane
peninsula	San Pablo Peninsula
PG&E	Pacific Gas and Electric
PM <sub>10</sub>	Inhalable Particulate Matter



---

## ABBREVIATIONS AND ACRONYMS *(continued)*

---

PM <sub>2.5</sub>	Fine Inhalable Particulate Matter
the Point	point of land known as Point Molate
ppb	parts per billion
ppm	parts per million
PTO	permit to operate
Pub. L.	Public Law
PWC	Navy Public Works Center
RAB	Restoration Advisory Board
RCRA	Resource Conservation and Recovery Act
refinery	Chevron Richmond Refinery
RFD	Richmond Fire Department
RI	Remedial Investigation
RMP	Risk Management Plan
RMPP	Risk Management Prevention Program
ROD	Record of Decision
ROG	Reactive Organic Compound
ROI	Region of Influence
RONA	Record of Non-Applicability
RPD	Richmond Police Department
RWQCB	Regional Water Quality Control Board
RWRCB	Regional Water Resources Control Board
SARA	Superfund Amendments and Reauthorization Act
SB	California State Senate Bill
SDWA	Safe Drinking Water Act
Seaport Plan	<i>San Francisco Bay Area Seaport Plan</i>
SHPO	State Historic Preservation Officer
SI	Site Inspection
SIP	State Implementation Plan
SLC	State Lands Commission
SPCC	Spill Prevention, Control, and Countermeasure
sq. ft.	square feet
Supp.	Supplement
SVOC	Semi-Volatile Organic Compound
SWDA	Solid Waste Disposal Act
SWMP	Storm Water Management Plan
SWPPP	Storm Water Pollution Prevention Plan
SWRCB	State Water Resources Control Board
TCE	Trichloroethylene
TPH	Total Petroleum Hydrocarbons
TSCA	Toxic Substances Control Act
TSO	Traffic Service Objective
UBC	Uniform Building Code
U.S. 101	U.S. Highway 101
U.S. ACE	U.S. Army Corps of Engineers
U.S. EPA	U.S. Environmental Protection Agency
U.S.C.	United States Code
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
UST	underground storage tank
v/c	volume-to-capacity ratio

---

## ABBREVIATIONS AND ACRONYMS *(continued)*

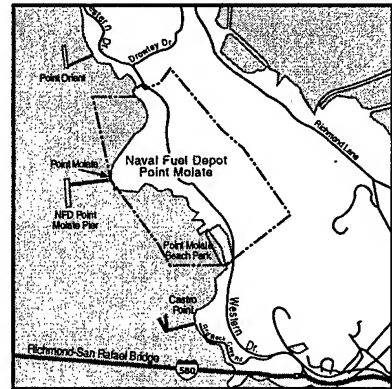
---

VOC	volatile organic compound
VPH	vehicles per hour
WB	westbound
WCCTAC	Western Contra Costa Transportation Advisory Council
WCCUSD	West Contra Costa Unified School District
WCS	worst-case scenario
WQCP	Water Quality Control Plan for the San Francisco Bay Basin
Zoning Ordinance	City of Richmond Zoning Ordinance

*This page intentionally left blank.*

---

## Executive Summary



---

## EXECUTIVE SUMMARY

### CONTENTS

Page

---

EXECUTIVE SUMMARY .....	ES-1
ES.1 Introduction .....	ES-1
ES.2 Purpose and Need For Action.....	ES-4
ES.3 Public Involvement Process .....	ES-5
ES.4 Alternatives.....	ES-7
ES.5 Affected Environment.....	ES-13
ES.6 Environmental Consequences .....	ES-14
ES.7 Other Considerations and Federal Executive Orders.....	ES-38
ES.8 Agency Coordination .....	ES-41
ES.9 Areas of Controversy .....	ES-41

## EXECUTIVE SUMMARY

### ES.1 INTRODUCTION

The Defense Base Closure and Realignment Act of 1990 (DBCRA), as amended, 10 United States Code (U.S.C.) § 2687 note at 582-606 established a process to close and realign military bases and authorized three rounds of base closures (initiated in calendar years 1991, 1993, and 1995). As part the 1995 round, the Base Realignment and Closure (BRAC) Commission recommended that the Secretary of Defense close the Point Molate Naval Refueling Station, Richmond, California (Fleet and Industrial Supply Center, Naval Fuel Depot Point Molate [NFD Point Molate]). The BRAC Commission recommendation was approved by President Clinton and accepted by the 104th Congress in September 1995.

NFD Point Molate is located on the San Pablo Peninsula, in the northwest corner of the City of Richmond (City), in Contra Costa County, California (Figures ES-1 and ES-2). NFD Point Molate occupies about 413 acres (167 hectares [ha]), consisting of 313 acres (127 ha) of dry land and 100 acres (40 ha) of submerged lands in San Francisco Bay. The Department of the Navy (Navy) acquired the NFD Point Molate property in 1942 and developed it for the storage and distribution of fuel for the Pacific Fleet. NFD Point Molate ceased its fuel storage and distribution mission in 1995 and operationally closed in 1998. The property is currently in caretaker status.

Section 2906 of DBCRA exempted the decision to close NFD Point Molate from the National Environmental Policy Act of 1969 (NEPA), as amended, 42 U.S.C. §§ 4321-4370d, documentation requirements, 10 U.S.C. § 2687 note. DBCRA did not, however, exempt the Navy disposal action and potential community reuse from NEPA analysis. DBCRA also required that Navy treat the Local Redevelopment Authority's reuse plan as part of the proposed Federal action (§ 2907 (b)(7)(L)(iv)II) of Public Law [Pub. L.] No. 101-510 as amended, codified at 10 U.S.C. § 2687 note). Other requirements under DBCRA pertinent to the disposal and reuse of NFD Point Molate include environmental restoration of the property and compliance with Federal property disposal laws and regulations. The local reuse plan for the property is the *Draft Point Molate Reuse Plan* (Draft Reuse Plan) (City of Richmond 1997a), adopted by the Richmond City Council in April 1997. The goals of the Draft Reuse Plan include the following:

- Preservation of open space and visual quality
- Long-term economic viability
- Promotion of public access and use
- Ability to attract regional interest
- Compatibility with other proposed uses

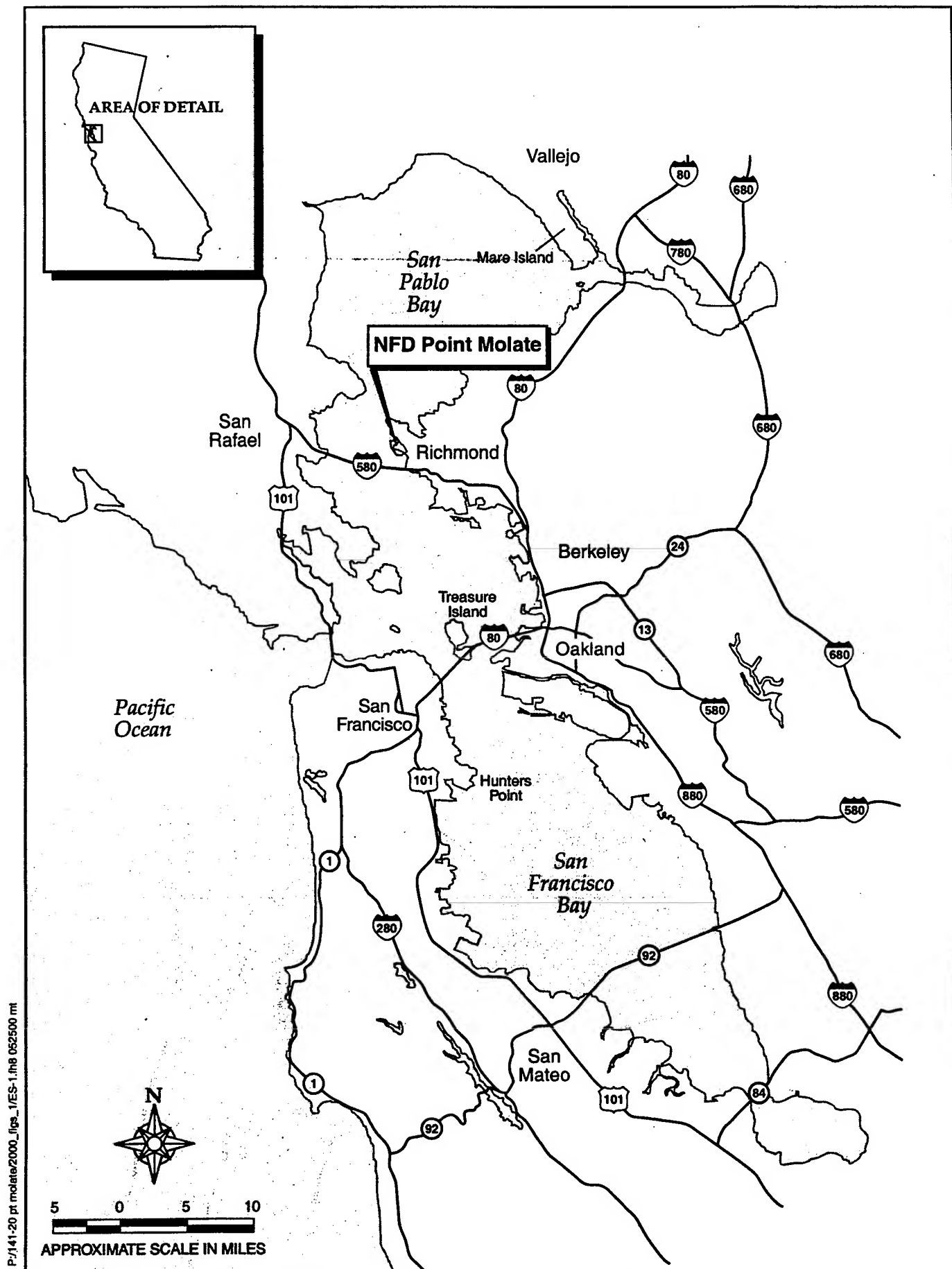
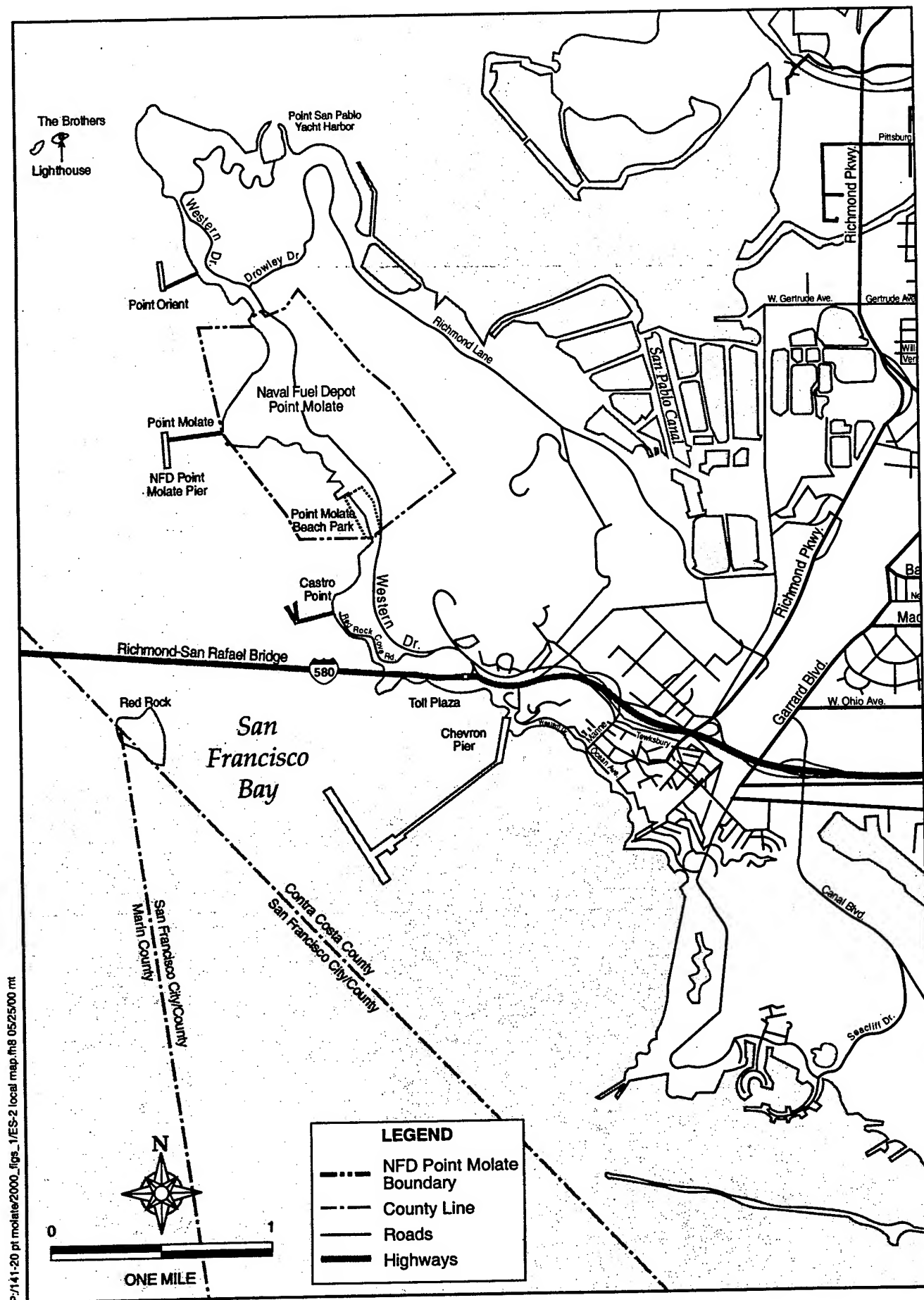


Figure ES-1: Area Map of NFD Point Molate



P:\11-20 pt molate\2000\_fig\_1\ES-2 local map.mxd 05/25/00 mt

Figure ES-2: Local Map of NFD Point Molate



- Promotion of historic legacy or use
- New jobs creation
- Minimal environmental impacts, especially biological
- City revenue generation
- Mix of uses

This Draft Environmental Impact Statement/Environmental Impact Report (EIS/EIR) is being prepared in accordance with NEPA; the Council on Environmental Quality implementing regulations for NEPA, 40 Code of Federal Regulations (C.F.R.) Parts 1500-1508 (1998); Department of the Navy Environmental and Natural Resources Program Manual (OPNAVINST 5090.1B, CH-2, 1999); DBCRA; and the California Environmental Quality Act of 1970 (CEQA), California Public Resources Code §§ 21000-21178.1 (West 1996 & Supp. 1999).

NEPA and CEQA encourage the cooperation of Federal, state, and local agencies to the fullest extent possible to reduce duplication of effort (40 C.F.R. 1506.2(c) and California Code of Regulations Title 14, Division 6, Chapter 3 § 155226). Therefore, Navy and the City have prepared this joint document. Navy is the lead agency under NEPA, and the City is the lead agency under CEQA.

This document evaluates the potential impacts on the physical environment that could result from Federal disposal of NFD Point Molate and community reuse of the property. The Federal action is the disposal of Navy property at NFD Point Molate from Federal ownership and potential community reuse of the property. The local action is community reuse of the NFD Point Molate property upon disposal, in accordance with the approved Draft Reuse Plan.

Navy will use this document to fulfill its NEPA requirements in making disposal decisions for the Federal property, NFD Point Molate. The City will use this document to fulfill its CEQA requirements and in its consideration of any necessary general plan amendments, specific plans, planned developments, and/or rezoning of the area resulting from the implementation of the Draft Reuse Plan. Future site-specific infrastructure and development proposals for the property could require additional environmental analysis under CEQA if the nature and magnitude of impacts differ substantially from those discussed in this document.

## ES.2 PURPOSE AND NEED FOR ACTION

The purpose of and need for the proposed Federal action is to dispose of excess Federal property at NFD Point Molate for subsequent reuse. The purpose of and need for the local action is to reuse the property under an economically viable and balanced reuse plan that creates jobs, supports new businesses, balances development with

environmental preservation, and integrates the new land uses with current plans for the Richmond community.

### ES.3 PUBLIC INVOLVEMENT PROCESS

#### ES.3.1 Introduction

Both NEPA and CEQA require that the public be informed of the proposed actions, alternatives to the proposed actions, and potential environmental consequences of the actions and alternatives. Public opportunities to comment on and participate in the process during preparation of this document are outlined below. Public notification is designed to include a full spectrum of area residents and community organizations. The comments from agencies and the public associated with the Navy disposal and community reuse of NFD Point Molate are important in identifying the environmental concerns addressed in this document. Appendix B contains public involvement materials.

Methods to involve the public during preparation of this document include the following:

- Publishing national public notices in the Federal Register. The public was notified of the Navy's/City's intent to prepare this document by a joint Notice of Intent (NOI)/Notice of Preparation (NOP) published on September 15, 1997, in the Federal Register (Volume 62, Number 178) and by the filing of a NOP with the California Governor's Office of Planning and Research. The public comment period ended on October 17, 1997.
- Holding a public scoping meeting. The meeting was held on October 1, 1997.
- Providing a 45-day public comment period for the Draft EIS/EIR.
- Holding a public meeting to receive comments on the Draft EIS during the public comment period. (Please see the transmittal letter accompanying this document for the date, time, and location).
- Publishing local public notices of hearings, mailing public announcements, and coordinating media coverage and press releases.
- Maintaining a mailing list to distribute information.

#### ES.3.2 Scoping Process

The purpose of scoping is to identify potential environmental concerns regarding disposal and reuse for consideration. Scoping includes the dissemination of information to the public and agencies and noticing public meetings in the Federal Register, in local newspapers, and by direct mail.

Press releases were sent to the news media, and notices were published in three local newspapers, the *West Contra Costa Times* (September 27 and 28, 1997), the *Oakland Tribune* (September 27 and 28, 1997), and the *Richmond Post* (September 24 and 28, 1997). Letters announcing a scoping meeting, including a summary of reuse alternatives, were mailed to public agencies, public interest groups, and interested individuals. A public scoping meeting was held at Richmond City Hall on October 1, 1997, to receive oral and written comments. Thirty-five people attended the scoping meeting, including agency representatives and members of the public. During the scoping period, seven letters were received. The City and Navy considered all comments received during the scoping period in the preparation of this document.

### ES.3.3 Public Review

#### *Draft Document*

The public is invited to review and comment on this document. The following steps have been taken to notify the public and other interested parties that the document is available for review and comment and to announce the beginning of the 45-day comment period.

- A Notice of Availability of the document was published in the Federal Register, and public notices and/or documents were distributed.
- A Notice of Completion (required under CEQA) was filed with the Governor's Office of Planning and Research State Clearinghouse.

The public and concerned agencies and groups are invited to send written comments on this draft document to the following addresses:

Southwest Division  
Naval Facilities Engineering Command  
1230 Columbia Street, Suite 1100  
San Diego, CA 92101  
Attn: Mr. Robert Montana  
Phone: (619) 532-0942  
Fax: (619) 532-0940

And

City of Richmond Redevelopment Agency  
330 25<sup>th</sup> Street  
Richmond, CA 94804  
Attn: Mr. Gary Hembree  
Phone: (510) 307-8140  
Fax: (510) 307-8149

A public hearing will be held during the 45-day public review period to hear comments on this draft document. The time and place of the hearing is noted in the transmittal letter accompanying this document and will be announced in the media.

#### ***Final Document***

A final document, which incorporates and responds to comments received on the draft document, will be furnished to persons registering official comment on the draft document and to others requesting a copy. A Notice of Availability of the final document will be published in the Federal Register and in public notices and press releases.

As required under NEPA, there is a 30-day waiting period after the Notice of Availability is published in the Federal Register. During this period, the public may comment on the adequacy of responses to comments and on the final document. After the 30-day waiting period, a NEPA Record of Decision can be signed.

To comply with CEQA, a Notice of Determination would be filed after the City approves a discretionary action related to the project (e.g., acceptance of the property from Navy, a City of Richmond General Plan amendment, etc.). As required under CEQA, mitigation measures would be included in a Mitigation Monitoring and Reporting Program as appropriate. The City also would prepare findings with respect to adoption of an alternative and mitigation measures. Should any plan approved by the City have significant unavoidable environment impacts, a statement of overriding considerations is required by CEQA.

### **ES.4 ALTERNATIVES**

Navy can either dispose of NFD Point Molate excess property for subsequent community reuse or retain the property in Federal ownership (No Action Alternative). The Navy disposal action is considered to be a component of each reuse alternative.

#### **ES.4.1 Navy Disposal Action**

Navy would dispose of NFD Point Molate property out of Federal ownership to a non-Federal entity for community reuse.

#### **ES.4.2 Community Reuse Alternatives**

##### ***Overview***

The Draft Reuse Plan sets forth a conceptual land use plan to serve as a guide for reuse and redevelopment of the NFD Point Molate property. The Draft Reuse Plan is a mixed-use development concept of residential, commercial, industrial, and open space and recreation land uses. The Draft Reuse Plan anticipates redevelopment in areas currently or previously developed. Undeveloped areas and areas of steep terrain would remain as open space or be used for recreation. The Draft Reuse Plan describes a broad range of

development types and intensities for NFD Point Molate. These development opportunities were combined to form three separate and distinct alternatives that maintain consistency with the goals and objectives of the Draft Reuse Plan. The community reuse alternatives for NFD Point Molate are Residential/Commercial (Alternative 1), Industrial/Commercial (Alternative 2), and Recreation/Commercial (Alternative 3). The three community reuse alternatives vary with regard to the amount and type of development proposed, as described below.

Alternative 1 includes all the land uses described in the Draft Reuse Plan (see Appendices C and D). Alternatives 2 and 3 are consistent with the Draft Reuse Plan and are variations on Alternative 1. NEPA requires that the lead agency for the EIS identify a preferred alternative. Alternative 2 is the preferred alternative.

The land uses proposed in the Draft Reuse Plan are founded on a number of concepts. Specifically, the land uses were developed in response to the following:

- Goals and objectives developed by the Local Redevelopment Authority (City local reuse authority) for NFD Point Molate.
- Opportunities and constraints of existing resources on the property.
- Preliminary market assessment of demand for potential land uses.

The Draft Reuse Plan states: "The Historic District is the central focus of NFD Point Molate and provides the themes for reuse and the appearance for development...It is in the village core of the Historic District and immediate surrounding area where use will be the most diverse, intensive, and publicly oriented...The historical village core will be supported by the Shoreline Park and hillside open space which will visually dominate the site...New development will be nestled amid the hills."

The Draft Reuse Plan established a range of land uses for various parts of NFD Point Molate. These land uses, with associated development intensities, are summarized in Table ES-1.

### ***Land Use Categories***

The development activities presented in the Draft Reuse Plan are categorized into four land use categories:

***Commercial:*** Could include retail shops, wine shops, restaurants, bed and breakfast establishments, small hotels, recording studios, museums, performing art centers, conference centers, retreat accommodations, office space, job-training facilities, and classrooms or labs.

**TABLE ES-1**  
**LAND USES UNDER NFD POINT MOLATE REUSE ALTERNATIVES**

LAND USE	ALTERNATIVE 1: RESIDENTIAL/ COMMERCIAL		ALTERNATIVE 2: INDUSTRIAL/ COMMERCIAL		ALTERNATIVE 3: RECREATION/ COMMERCIAL	
	BUILDABLE SQ. FEET	ACRES	BUILDABLE SQ. FEET	ACRES	BUILDABLE SQ. FEET	ACRES
Commercial	175,967	27	175,967	27	160,903	27
Light Industrial <sup>1</sup>	97,474	6	1,346,233	61	213,670	8
Residential <sup>2</sup>	1,095,696 (730 units)	55	0	0	0	0
Open Space/Recreation, including 100 acres of submerged land	N/A	325	N/A	325	N/A	378
Total	1,369,137	413	1,522,200	413	374,573	413

Source: City of Richmond 1997a.

<sup>1</sup> Calculation of floor area assumes a floor-area ratio of 0.5 (i.e., Industrial/Office Flex/920 from City General Plan).

<sup>2</sup> Each residential unit is assumed to be about 1,500 square feet in size.

N/A = Not Applicable

*Light Industrial:* Could include manufacturing, sales, and distribution businesses that provide retail, food/wine products, and electrical/electronic equipment and parts. Also could include wholesale services, warehousing, trucking and courier services, equipment leasing, printing and publishing, data processing, telecommunications, and research and development.

*Residential:* Could include apartments and one- to two-family dwelling units, apartments over commercial units in mixed-use areas, and live/work units, such as artist studios.

*Open Space/Recreation:* Could include passive open space (such as hiking trails) and active open space (such as soccer fields).

#### **Assumptions for All Community Reuse Alternatives**

The assumptions presented here are included as part of the description for all three community reuse alternatives.

#### **Utility Infrastructure**

Planned infrastructure improvements listed below are from the Draft Reuse Plan:

- Electrical and lighting systems.
- Water supply systems and fire protection work.

- Gas mains and electrical transmission lines.
- Sewer and storm water systems.
- Streets, median islands, vehicle access, sidewalks, gutters and traffic signing.

#### **Transportation, Traffic, and Circulation**

- The analysis assumes there would be no eastbound off-ramp from Interstate 580 (I-580) to Western Drive and therefore no direct access to Western Drive from the west.
- Within the project site, the ultimate design of the project would include sidewalks at key locations, primarily along Western Drive, connecting to major activity centers. The relatively flat grades of the western portions of the property would accommodate a bicycle path.
- Future detailed project site plans would accommodate parking demand in off-street parking lots, which would be distributed within the project site.

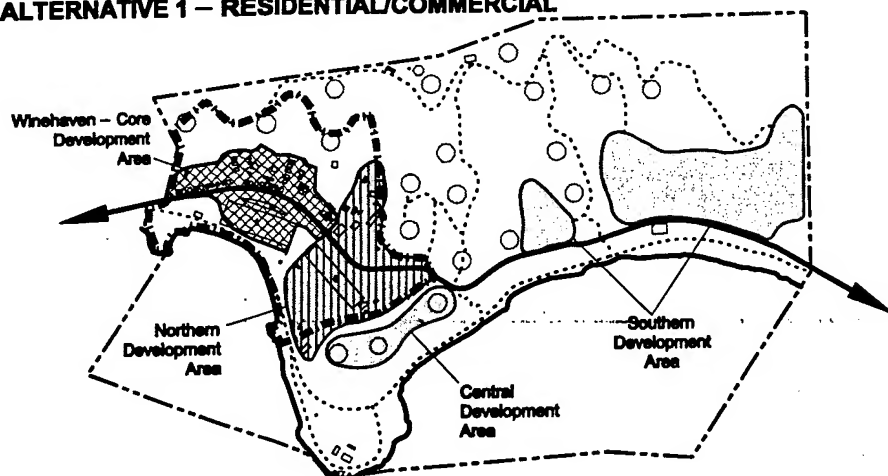
#### **Community Warning System**

Contra Costa County maintains a Community Warning System to address potential toxic air releases from its industrial facilities. NFD Point Molate is adjacent to heavy industrial uses that include a petroleum refinery and a nearby chemical plant. Releases of toxic substances from these facilities could result in exposure to people at NFD Point Molate. Therefore, before issuing a certificate of occupancy for any commercial, industrial, or residential uses at NFD Point Molate, the City would ensure that the Community Warning System had siren coverage over the property. Prospective property owners would be advised of the potential for accidental releases and would be informed of the Community Warning System and other aspects of protection from accidental releases. New buildings would be required to be as air-tight as possible, which would include the use of superior windows and doors.

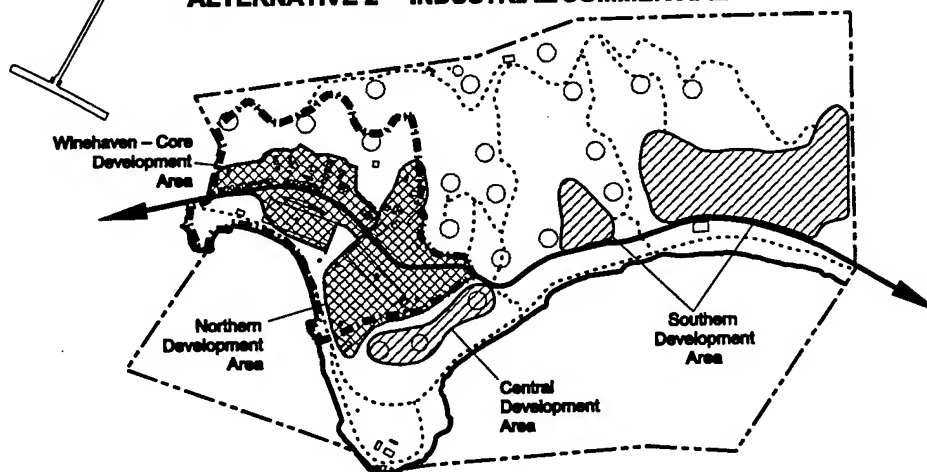
#### **Alternative 1: Residential/ Commercial**

The Residential/Commercial alternative includes about 55 acres (22 ha) of residential, 27 acres (11 ha) of commercial, 6 acres (2.4 ha) light industrial, and 325 acres (131 ha) of open space/recreation uses (including 100 acres [40 ha] of submerged land). The distribution of land uses is shown in Figure ES-3 and described below by development area. The Southern Development Area is about 35 acres (14 ha); the Central Development area is about 6 acres (2.4 ha); the Northern Development Area is about 20 acres (8 ha); and the Winehaven-Core Development Area is about 17 acres (7 ha). The remaining 325 acres (131 ha) of the NFD Point Molate Property would support an open space/recreation land use, including passive recreation, such as hiking trails on the

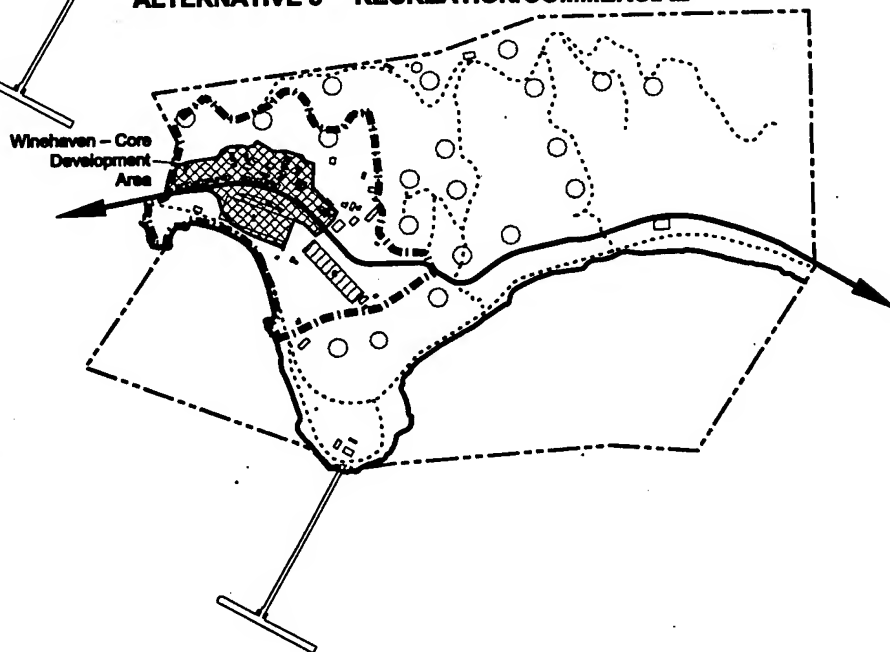
# **ALTERNATIVE 1 – RESIDENTIAL/COMMERCIAL**













# **ALTERNATIVE 2 – INDUSTRIAL/COMMERCIAL**



# **ALTERNATIVE 3 – RECREATION/COMMERCIAL**



## **LEGEND**

-  Commercial/Light Industrial
-  Light Industrial
-  Residential
-  Residential/Commercial
-  Open Space/Recreation
-  Western Drive
-  NRHP Historic District Boundary
-  Proposed Trail
-  NFD Point Molate Boundary
-  Underground Fuel Tank

Source: City of Richmond 1997a

G:\141-20\Map\14120\_463.DWG 062000.mt



steep hillsides above Western Drive, and active recreation uses along the shoreline. Shoreline uses could include a public plaza, formal promenade, shoreline park and trail, a waterfront café, watercraft rental, boating center, and seafood, produce, or public markets.

*Southern Development Area.* This area would support a residential land use. Development could include single-family and multifamily residences with 12 and 20 units per acre (about 30 and 49 units per ha), respectively, for a total of 424 residences on 35 acres (about 14 ha).

*Central Development Area.* This area would support a residential land use. Development could include multifamily residences at a density of 20 units per acre (about 49 units per ha), for a total of 120 units.

*Northern Development Area.* This area would support commercial and residential land uses. Commercial uses could include a job-training and conference center with lodging and a small hotel. Residential development could include about 77 live/work units and, on about 12 acres, about 109 units of single-family residences, corresponding to a density of 9 units per acre (about 22 units per ha).

*Winehaven-Core Development Area.* This area would support commercial and light industrial land uses. Possible commercial development could include a retreat center, bed and breakfast, museum, restaurant, and office space. Light industrial development could include a winery or office space.

## **Alternative 2: Industrial/ Commercial**

The Industrial/Commercial alternative (preferred alternative) includes about 27 acres (11 ha) of commercial, 61 acres (25 ha) of light industrial, and 325 acres (131 ha) of open space/recreation land uses (including 100 acres [40 ha] of submerged land). Most of the development would be light industrial. There would be no residential uses. The distribution of land uses is shown in Figure ES-3 and described below by development area. The remaining 325 acres (131 ha) would support an open space/recreation land use, including passive recreation, such as hiking trails on the steep hillsides above Western Drive, and active recreation uses along the shoreline. Shoreline uses could include a public plaza, formal promenade, shoreline park and trail, a waterfront café, watercraft rental, boating center, and seafood, produce, or public markets.

*Southern Development Area.* This area would support a light industrial land use. Development could include research and development and special light industries.

*Central Development Area.* This area would support a light industrial land use. Development could include research and development and special light industries.

*Northern Development Area.* This area would support commercial and light industrial land uses. Possible commercial developments could include a job-training and conference center with lodging and a small hotel, a satellite campus, and administrative services. Light industrial uses could include winery operations, research and development, laboratories, warehouses, and special industries.

*Winehaven-Core Development Area.* This area would support commercial and light industrial land uses. Possible commercial developments could include a retreat center, bed and breakfast, museum, restaurant, and office space. Light industrial uses could include a winery and office space.

### **Alternative 3: Recreation/Commercial**

The Recreation/Commercial alternative includes about 27 acres (11 ha) of commercial, 8 acres (3 ha) of light industrial, and 378 acres (153 ha) of open space/recreation land uses (including 100 acres [40 ha] of submerged land). There would be no residential uses or commercial uses involving overnight stays. The distribution of land uses is shown in Figure ES-3 and described below by development area. The open space/recreation land use would include passive recreation such as hiking trails on the steep hillsides above Western Drive, and active recreation uses along the shoreline. Shoreline uses could include a public plaza, formal promenade, shoreline park and trail, a waterfront café, watercraft rental, boating center, and seafood, produce, or public markets.

*Northern Development Area.* Buildings 6 and 17 would support light industrial uses similar to those in the Winehaven-Core Development Area.

*Winehaven-Core Development Area.* This area would support commercial and light industrial land uses. Possible commercial developments could include a museum, restaurant, and office space. Light industrial uses could include a winery and office space.

### **No Action Alternative**

NFD Point Molate would remain a closed Federal property under caretaker status. It would not be reused or redeveloped. Environmental cleanup would continue and be completed.

## **ES.5 AFFECTED ENVIRONMENT**

Chapter 3 describes the existing condition and setting of NFD Point Molate and the area surrounding the property that could be affected by the proposed action. The discussion includes descriptions of land use; visual resources; socioeconomics; public services; cultural resources; biological resources; water resources; geology and soils; transportation, traffic and circulation; air quality; noise; utilities; and hazardous materials and waste.

---

**ES. 6 ENVIRONMENTAL CONSEQUENCES**

This EIS/EIR evaluates the potential environmental consequences of the decision to dispose of Navy property and the proposed reuse of NFD Point Molate by the City. The EIS/EIR compares potential environmental impacts with factors for impact significance for each environmental resource category mentioned in the foregoing "Affected Environment" section. Direct environmental consequences are those associated with Navy's disposal action and the No Action Alternative, and indirect environmental consequences are those associated with reuse of the NFD Point Molate property. Navy cannot control reuse after the property is conveyed from Federal ownership. Therefore, implementation of mitigation measures for reuse-related environmental impacts would be the responsibility of the acquiring entity and not the responsibility of Navy.

Tables ES-2 and ES-3 summarize the environmental consequences under NEPA and CEQA, respectively, of the Navy disposal action, three community reuse alternatives, and No Action Alternative.

**TABLE ES-2**  
**SUMMARY OF SIGNIFICANT ENVIRONMENTAL IMPACTS AND MITIGATIONS UNDER NEPA**

Resource Area	NAVY ACTIONS		REUSE ALTERNATIVES		
	Navy Disposal	No Action	Alternative 1: Residential/Commercial	Alternative 2: Industrial/Commercial	Alternative 3: Recreation/Commercial
Land Use	No impacts.	No impacts.	<p><b>Significant Unmitigable Impact</b>  <i>Impact: Incompatibility between On-Site Land Uses and Adjacent Off-Site Land Uses.</i> Introduction of a residential land use component under Alternative 1 would be incompatible with the heavy industrial uses of the adjacent refinery and nearby chemical plant due to the potential exposure of future residents to accidental releases of toxic substances from the refinery. The Southern Development Area and most of the Central and Northern Development Areas, which are proposed for residential development, lie within the Alternate Release Scenario impact circle for ammonia as developed in Chevron's Risk Management Program. Because it would not be physically possible to provide an adequate buffer between sensitive receptors in these areas and the off-site sources of potential accidental release, introduction of residential uses in these areas would result in a significant unmitigable impact.</p> <p><b>Significant and Mitigable Impact</b>  <i>Impact 1: Incompatibility between On-Site Land Uses.</i> Expansion of the existing sewage treatment plant or construction of a new sewage treatment plant, as well as the possibility of a winery operation on site, could result in incompatibility between these land uses and other development on-site.</p> <p align="right">(continued on next page)</p>	<p>This impact is less than significant under Alternative 2.</p> <p><b>Significant and Mitigable Impact</b>  <i>Impact: Incompatibility between On-Site Land Uses.</i> This impact is the same as described for Alternative 1.</p> <p><i>Mitigation:</i> Mitigation is the same as described for Alternative 1, except that Alternative 2 would not have residential use.</p>	<p>This impact is less than significant under Alternative 3.</p> <p><b>Significant and Mitigable Impact</b>  <i>Impact: Incompatibility between On-Site Land Uses.</i> This impact is the same as described for Alternative 1.</p> <p><i>Mitigation:</i> Mitigation is the same as described for Alternative 1, except that Alternative 3 would not have residential use.</p>

**TABLE ES-2**  
**SUMMARY OF SIGNIFICANT ENVIRONMENTAL IMPACTS AND MITIGATIONS UNDER NEPA (CONTINUED)**

Resource Area	NAVY ACTIONS		REUSE ALTERNATIVES		
	Navy Disposal	No Action	Alternative 1: Residential/Commercial	Alternative 2: Industrial/Commercial	Alternative 3: Recreation/Commercial
Land Use (Cont.)			<p><i>Mitigation 1.</i> Site sewage treatment plant, winery operations, and other development that could adversely affect residential or commercial uses, away from other on-site development so that odors from sewage treatment, a winery, or other operations do not adversely affect these developments.</p> <p><i>Impact 2: Inconsistency with Plans and Policies.</i> The residential land use proposed under Alternative 1 would not be consistent with Richmond General Plan land use policies and zoning ordinances that promote separation of residential land uses from heavy industrial and maritime uses. While the open space/recreation lands at NFD Point Molate combined with adjacent open space lands of the refinery would provide some separation between the refinery operations and proposed residences, it would not be adequate separation to reduce the potential risk of an accidental release of toxic substances to a sensitive receptor (residential areas) as discussed above.</p> <p><i>Mitigation 2.</i> Modify the Richmond General Plan and Zoning Ordinance to allow placement of residential dwellings with heavy industrial and maritime uses at NFD Point Molate. Expand, refine, or eliminate the land use policies and zoning ordinances discussed in Section 3.1.3 that advocate separation of residential land uses from heavy industrial and maritime uses.</p>	<p>This impact is less than significant under Alternative 2.</p>	<p>This impact is less than significant under Alternative 3.</p>
Visual Resources	No impacts.	No impacts.	No significant impacts.	No significant impacts.	No significant impacts.

TABLE ES-2  
SUMMARY OF SIGNIFICANT ENVIRONMENTAL IMPACTS AND MITIGATIONS UNDER NEPA (CONTINUED)

Resource Area	NAVY ACTIONS		REUSE ALTERNATIVES			
	Navy Disposal	No Action	Alternative 1: Residential/Commercial	Alternative 2: Industrial/Commercial	Alternative 3: Recreation/Commercial	
Socioeconomics	No impacts.	No impacts.	No significant impacts.	No significant impacts.	No significant impacts.	
Public Services	No impacts.	No impacts.	No significant impacts.	No significant impacts.	No significant impacts.	
Cultural Resources	No significant impacts.	No impacts.	No significant impacts.	No significant impacts.	No significant impacts.	
Biological Resources	No impacts.	No impacts.	No significant impacts.	No significant impacts.	No significant impacts.	
Water Resources	No impacts.	No impacts.	No significant impacts.	No significant impacts.	No significant impacts.	
Geology and Soils	No impacts.	No impacts.	<b>Significant and Mitigable Impact</b> <i>Impact: Severe Seismic Ground Shaking.</i> New construction would meet current seismic standards contained in the Uniform Building Code (UBC), the California Division of Mines and Geology (CDMG) guidelines for evaluating seismic hazards, and the Safety Element of the General Plan. State law only requires seismic retrofitting of older unsafe buildings if they are to be used for municipal buildings. Therefore, older historic structures could be damaged in a large earthquake and pose a risk to people and         (continued on next page)	<b>Significant and Mitigable Impact</b> <i>Impact: Severe Seismic Ground Shaking.</i> This impact and its mitigation are the same as under Alternative 1.	<b>Significant and Mitigable Impact</b> <i>Impact: Severe Seismic Ground Shaking.</i> This impact and its mitigation are the same as under Alternative 1.	

**TABLE ES-2**  
**SUMMARY OF SIGNIFICANT ENVIRONMENTAL IMPACTS AND MITIGATIONS UNDER NEPA (CONTINUED)**

Resource Area	NAVY ACTIONS		REUSE ALTERNATIVES		
	Navy Disposal	No Action	Alternative 1: Residential/Commercial	Alternative 2: Industrial/Commercial	Alternative 3: Recreation/Commercial
Geology and Soils (Cont.)			<p>structures. In addition, infrastructure components (utilities and roadways) could be damaged or destroyed.</p> <p><i>Mitigation:</i> Before reusing existing structures, perform the following:</p> <ul style="list-style-type: none"> <li>Analyze and, if necessary, perform seismic upgrades of structures designated for reuse when rehabilitation occurs to minimize life safety risks from failures in large earthquakes. Do not reuse structures that cannot feasibly be retrofitted to meet a life safety objective.</li> <li>Inspect and retrofit to existing standards those utilities that are essential for maintaining emergency services or that could increase hazards (such as fire). Replace utilities that cannot be retrofitted or supplement them with backup systems.</li> </ul>		
Transportation, Traffic, and Circulation	No impacts.	No impacts.	<p><b>Significant and Mitigable Impacts</b>  <i>Impact 1: Unsafe Circulation.</i> The substandard condition of sections of Western Drive and the lack of access to Western Drive from eastbound I-580 would result in inadequate conditions to safely support the estimated traffic volumes under Alternative 1. While planned reuse of NFD Point Molate would result in improvements to Western Drive on site, the off-site road segment of Western Drive (between I-580 and the south entrance) do not conform to City standards.</p> <p>(continued on next page)</p>	<p><b>Significant and Mitigable Impacts</b>  <i>Impact 1: Unsafe Circulation.</i> This impact and its mitigation are the same as under Alternative 1.</p>	<p><b>Significant and Mitigable Impacts</b>  <i>Impact 1: Unsafe Circulation.</i> This impact and its mitigation are the same as under Alternative 1.</p>

**TABLE ES-2**  
**SUMMARY OF SIGNIFICANT ENVIRONMENTAL IMPACTS AND MITIGATIONS UNDER NEPA (CONTINUED)**

Resource Area	NAVY ACTIONS		REUSE ALTERNATIVES		
	Navy Disposal	No Action	Alternative 1: Residential/Commercial	Alternative 2: Industrial/Commercial	Alternative 3: Recreation/Commercial
Transportation, Traffic, and Circulation (Cont.)			<p><i>Mitigation 1.</i> Widen Western Drive between I-580 and the entrance to the NFD Point Molate property to conform to applicable City standards. Design Western Drive to be a two-lane roadway, with turn lanes, that accommodates bicyclists and pedestrians. Provide signs, appropriate striping, and roadway markings at I-580 and Western Drive to direct eastbound travelers on I-580 to Western Drive.</p> <p><i>Impact 2: Deterioration in LOS at the Westbound I-580/Richmond Parkway Intersection.</i> At build-out in 2020, Alternative 1 would degrade LOS at the westbound I-580/Richmond Parkway intersection to LOS E in the A.M. peak hour.</p>	<p><i>Impact 2: Deterioration in LOS at the Westbound I-580/Richmond Parkway Intersection.</i> By 2010, the westbound I-580/Richmond Parkway intersection is projected to deteriorate to LOS F during the A.M. peak hour. This is a conservative projection of the impact on this intersection for two reasons: (1) it is a non-standard signalized intersection that is only partially controlled, and (2) trip generation was based on land uses using the maximum floor-area ratio (FAR) permitted by the City of 0.50 (see the Traffic Assumptions in Chapter 2). If the actual FAR of development is closer to 0.30 (which is typical for the City), the LOS would likely remain acceptable.</p> <p><i>Mitigation 2.</i> Mitigation is the same as that identified for Alternative 1. Implementing this mitigation measure would improve LOS during the A.M. and P.M. peak hours to LOS B in 2010, reducing this impact to a</p> <p align="right">(continued on next page)</p>	<p>This impact is less than significant under Alternative 3.</p>



**TABLE ES-2**  
**SUMMARY OF SIGNIFICANT ENVIRONMENTAL IMPACTS AND MITIGATIONS UNDER NEPA (CONTINUED)**

Resource Area	NAVY ACTIONS		REUSE ALTERNATIVES		
	Navy Disposal	No Action	Alternative 1: Residential/Commercial	Alternative 2: Industrial/Commercial	Alternative 3: Recreation/Commercial
Transportation, Traffic, and Circulation (Cont.)			<p>configuration is one right-turn lane, two through lanes, and one left-turn lane). Approve and assure implementation of the re-striping of this intersection in consultation with the California Department of Transportation (Caltrans). This mitigation measure would improve the LOS to B.</p> <p><i>Impact 3: Traffic Volumes on Richmond Parkway Ramps.</i> Freeway ramps with volumes of less than 1,500 vehicles per hour are considered by Caltrans to operate acceptably; ramps with volumes greater than 1,500 vehicles per hour require further analysis. The threshold would be exceeded on the Richmond Parkway westbound on-ramp in the A.M. peak hour.</p> <p><i>Mitigation 3.</i> Monitor the Richmond Parkway westbound on-ramp by conducting a traffic study for each phase of the project. Evaluate the impact of the development projections of traffic for the freeway ramp. If the threshold of 1,500 vehicles per hour is exceeded, conduct an operational analysis satisfying Caltrans requirements. If the operational analysis indicates an unacceptable operating condition, develop modifications to the ramp with the goal of reducing the vehicles per hour to less than 1,500.</p> <p>This is not an impact under Alternative 1.</p>	<p>less than significant level. In 2020, this mitigation measure would result in LOS C.</p> <p><i>Impact 3: Traffic Volumes on Richmond Parkway Ramps.</i> The Caltrans threshold of 1,500 vehicles per hour would be exceeded on the Richmond Parkway westbound on-ramp by 2010 during the A.M. peak hour and the Richmond Parkway eastbound off-ramp in 2020 during the P.M. peak hour.</p> <p><i>Mitigation 3.</i> Mitigation is the same as that identified for Alternative 1.</p>	<p><i>Impact 2: Traffic Volumes on Richmond Parkway Ramp.</i> The Caltrans threshold of 1,500 vehicles per hour would be exceeded on the Richmond Parkway westbound on-ramp during the A.M. peak hour.</p> <p><i>Mitigation 2.</i> Mitigation is the same as that identified for Alternative 1, Mitigation 3.</p> <p>This is not an impact under Alternative 3.</p>

(continued on next page)

TABLE ES-2  
SUMMARY OF SIGNIFICANT ENVIRONMENTAL IMPACTS AND MITIGATIONS UNDER NEPA (CONTINUED)

Resource Area	NAVY ACTIONS		REUSE ALTERNATIVES		
	Navy Disposal	No Action	Alternative 1: Residential/Commercial	Alternative 2: Industrial/Commercial	Alternative 3: Recreation/Commercial
Transportation, Traffic, and Circulation (Cont.)			<p>This is not an impact under Alternative 1.</p>	<p><i>Mitigation 4.</i> Remove the channelization island separating traffic turning right from westbound Tewksbury Avenue onto northbound Richmond Parkway. Replace the free northbound through lane with a signal-controlled northbound lane. Modify the signal to control the northbound right-turn lane. Re-stripe the intersection to one right-turn lane and two left-turn lanes (currently the configuration is one right-turn lane and one left-turn lane). With mitigation, the intersection would operate at LOS A during the P.M. peak hour.</p> <p><i>Impact 5: Deterioration in LOS at the Eastbound I-580/Marine Street Intersection.</i> At full build-out in 2020, Alternative 2 is expected to adversely affect the I-580 eastbound ramp/Marine Street intersection, reducing the LOS from B to E in the P.M. peak hour. The significance of this impact depends on the timing of build-out of the project, as well as the ultimate density of development. This intersection would operate at an acceptable LOS D with the project in 2010; however, by 2020, the additional increment of regional growth would lead to a significant adverse impact. Because of the characteristics of the terrain and the geometry of the off-ramp, physical (widening) mitigation for this impact would not be feasible.</p> <p>(continued on next page)</p>	<p>This is not an impact under Alternative 3.</p> <p>This is not an impact under Alternative 1.</p>

TABLE ES-2  
SUMMARY OF SIGNIFICANT ENVIRONMENTAL IMPACTS AND MITIGATIONS UNDER NEPA (CONTINUED)

NAVY ACTIONS			REUSE ALTERNATIVES		
Resource Area	Navy Disposal	No Action	Alternative 1: Residential/Commercial	Alternative 2: Industrial/Commercial	Alternative 3: Recreation/Commercial
Transportation, Traffic, and Circulation (Cont.)				The analysis performed for this EIS/EIR is based on a Floor-Area-Ratio (FAR) of 0.50, which is the maximum permitted by the City. Typically, developments of the type envisaged build out with a FAR in the range of 0.30 to 0.35. If, as the community reuse plan is developed, a lower-than-maximum FAR is produced, it is unlikely that the significant negative impact projected by this analysis would occur.  <i>Mitigation 5.</i> Prior to approval of a project phase, require the project proponent to evaluate the impact of the additional development on this intersection. If a significant adverse impact is identified, require a reduced FAR so that the intersection operates at LOS D or better.	
Air Quality	No impacts.	No impacts.	Significant and Mitigable Impacts <i>Impact 1: Objectionable Odors Associated with On-Site Activity.</i> Objectionable odors could result from commercial operations, light industrial operations, and wastewater treatment on the property. These odors could affect residents, occupants of commercial and industrial facilities, and visitors to the property.  (continued on next page)	Significant and Mitigable Impacts <i>Impact 1: Objectionable Odors Associated with On-Site Activity.</i> This impact and its mitigation are similar to that identified under Alternative 1, except that there would be less exposure because Alternative 2 does not propose residential uses. More odors could result from the light industrial operations.	Significant and Mitigable Impacts  This is not an impact under Alternative 3.

TABLE ES-2  
SUMMARY OF SIGNIFICANT ENVIRONMENTAL IMPACTS AND MITIGATIONS UNDER NEPA (CONTINUED)

Resource Area	NAVY ACTIONS		REUSE ALTERNATIVES		
	Navy Disposal	No Action	Alternative 1: Residential/Commercial	Alternative 2: Industrial/Commercial	Alternative 3: Recreation/Commercial
Air Quality (Cont.)			<p><i>Mitigation 1.</i> Prior to issuance of any permit, evaluate objectionable odors from light industrial uses on a project-specific basis and implement appropriate odor controls and/or buffers. For uses involving potential objectionable odor sources, such as a winery, incorporate adequate odor controls into the project design or provide adequate buffer zones between residential and industrial developments. Objectionable odors from wastewater are a function of the treatment options. If on-site treatment is selected, design and site the plant to ensure that residents are not subject to objectionable odors from the plant or select off-site wastewater treatment.</p> <p><i>Impact 2: Consistency with BAAQMD CAP.</i> Alternative 1 would be inconsistent with the BAAQMD Clean Air Plan (CAP) because CAP trip control measures were not considered in the Reuse Plan.</p> <p><i>Mitigation 2.</i> Prior to approval of any discretionary project, integrate CAP trip control measures into specific project development proposals.</p>	<p><i>Impact 2: Consistency with BAAQMD CAP.</i> This impact and its mitigation are the same as under Alternative 1.</p>	<p><i>Impact: Consistency with BAAQMD CAP.</i> This impact and its mitigation are the same as under Alternative 1.</p>
Noise	No impacts.	No impacts.	No significant impacts.	No significant impacts.	No significant impacts.

TABLE ES-2  
SUMMARY OF SIGNIFICANT ENVIRONMENTAL IMPACTS AND MITIGATIONS UNDER NEPA (CONTINUED)

Resource Area	NAVY ACTIONS		REUSE ALTERNATIVES		
	Navy Disposal	No Action	Alternative 1: Residential/Commercial	Alternative 2: Industrial/Commercial	Alternative 3: Recreation/Commercial
Utilities	No impacts.	No impacts.	<p><b>Significant and Mitigable Impact</b>  <i>Impact 1: Sanitary Sewer System.</i> The NFD Point Molate sewage treatment plant does not have the capacity to handle the maximum wastewater load of 360,000 gpd (1,400,000 lpd) estimated for this alternative (Harding Lawson Associates 1999).</p> <p><i>Mitigation 1:</i> The City's Master Utility Plan considers three options to meet the sanitary sewer system needs of Alternative 1: (1) expand the existing sewage treatment plant or construct a new treatment plant and collection system on site; (2) treat some wastewater on site and haul the excess to the Richmond Municipal Sewer District plant for treatment, and (3) construct a new pipeline and pumping system that would transfer all the wastewater to the Richmond Municipal Sewer District plant.</p>	<p><b>Significant and Mitigable Impact</b>  <i>Impact 1: Sanitary Sewer System.</i> This impact and its mitigation are the same as under Alternative 1, although the increased wastewater load would be greater than under Alternative 1.</p>	<p><b>Significant and Mitigable Impact</b>  <i>Impact 1: Sanitary Sewer System.</i> This impact and its mitigation are the same as under Alternative 1, although this alternative would have the least wastewater load among the three community reuse alternatives.</p>
Hazardous Materials and Waste	No impacts.	No impacts.	No significant impacts.	No significant impacts.	No significant impacts.

TABLE ES-3  
SUMMARY OF SIGNIFICANT ENVIRONMENTAL IMPACTS AND MITIGATIONS UNDER CEQA

Resource Area	NAVY ACTIONS		REUSE ALTERNATIVES		
	Navy Disposal	No Action	Alternative 1: Residential/Commercial	Alternative 2: Industrial/Commercial	Alternative 3: Recreation/Commercial
Land Use	No impacts.	No impacts.	<p><b>Significant Unmitigable Impact</b>  <i>Impact: Incompatibility between On-Site Land Uses and Adjacent Off-Site Land Uses.</i> Introduction of a residential land use component under Alternative 1 would be incompatible with the heavy industrial uses of the adjacent refinery and nearby chemical plant due to the potential exposure of future residents to accidental releases of toxic substances from the refinery. The Southern Development Area and most of the Central and Northern Development Areas, which are proposed for residential development, lie within the Alternate Release Scenario impact circle for ammonia as developed in Chevron's Risk Management Program. Because it would not be physically possible to provide an adequate buffer between sensitive receptors in these areas and the off-site sources of potential accidental release, introduction of residential uses in these areas would result in a significant unmitigable impact.</p> <p><b>Significant and Mitigable Impact</b>  <i>Impact 1: Incompatibility between On-Site Land Uses.</i> Expansion of the existing sewage treatment plant or construction of a new sewage treatment plant, as well as the possibility of a winery operation on site, could result in incompatibility between these land uses and other development on-site.            (continued on next page)</p>	<p>This impact is less than significant under Alternative 2.</p> <p><b>Significant and Mitigable Impact</b>  <i>Impact: Incompatibility between On-Site Land Uses.</i> This impact is the same as described for Alternative 1.  <i>Mitigation:</i> Mitigation is the same as described for Alternative 1, except that Alternative 2 would not have residential use.</p>	<p>This impact is less than significant under Alternative 3.</p> <p><b>Significant and Mitigable Impact</b>  <i>Impact: Incompatibility between On-Site Land Uses.</i> This impact is the same as described for Alternative 1.  <i>Mitigation:</i> Mitigation is the same as described for Alternative 1, except that Alternative 3 would not have residential use.</p>

**TABLE ES-3**  
**SUMMARY OF SIGNIFICANT ENVIRONMENTAL IMPACTS AND MITIGATIONS UNDER CEQA (CONTINUED)**

Resource Area	NAVY ACTIONS		REUSE ALTERNATIVES		
	Navy Disposal	No Action	Alternative 1: Residential/Commercial	Alternative 2: Industrial/Commercial	Alternative 3: Recreation/Commercial
Land Use (Cont.)			<p><i>Mitigation 1.</i> Site sewage treatment plant, winery operations, and other development that could adversely affect residential or commercial uses, away from other on-site development so that odors from sewage treatment, a winery, or other operations do not adversely affect these developments.</p> <p><i>Impact 2: Inconsistency with Plans and Policies.</i> The residential land use proposed under Alternative 1 would not be consistent with Richmond General Plan land use policies and zoning ordinances that promote separation of residential land uses from heavy industrial and maritime uses. While the open space/recreation lands at NFD Point Molate combined with adjacent open space lands of the refinery would provide some separation between the refinery operations and proposed residences, it would not be adequate separation to reduce the potential risk of an accidental release of toxic substances to a sensitive receptor (residential areas) as discussed above.</p> <p><i>Mitigation 2.</i> Modify the Richmond General Plan and Zoning Ordinance to allow placement of residential dwellings with heavy industrial and maritime uses at NFD Point Molate. Expand, refine, or eliminate the land use policies and zoning ordinances discussed in Section 3.1.3 that advocate separation of residential land uses from heavy industrial and maritime uses.</p>	<p>This impact is less than significant under Alternative 2.</p>	<p>This impact is less than significant under Alternative 3.</p>
Visual Resources	No impacts.	No impacts.	No significant impacts.	No significant impacts.	No significant impacts.

TABLE ES-3  
SUMMARY OF SIGNIFICANT ENVIRONMENTAL IMPACTS AND MITIGATIONS UNDER CEQA (CONTINUED)

Resource Area	NAVY ACTIONS		REUSE ALTERNATIVES		
	Navy Disposal	No Action	Alternative 1: Residential/Commercial	Alternative 2: Industrial/Commercial	Alternative 3: Recreation/Commercial
Socioeconomics	No impacts.	No impacts.	No significant impacts.	No significant impacts.	No significant impacts.
Public Services	No impacts.	No impacts.	<p><b>Significant and Mitigable Impact</b></p> <p><i>Impact: Police and Fire Protection Services.</i> Under CEQA, the current staffing levels of the Richmond Police Department (RPD) and the Richmond Fire Department (RFD) are insufficient to support this alternative. RPD staffing levels are based on population, which would increase to about 2,000 residents under this alternative. RFD's response time goal for the NFD Point Molate property is six minutes. However, since the first crew is responsible for turning on the water, the effective response time before fire-fighting begins is usually between eight and ten minutes (City of Richmond 1998f).</p> <p><i>Mitigation.</i> Increase staff by the equivalent of 4.2 new full-time police officers (City of Richmond 1998g). Establish a fire station with a full crew (three firefighters) and fire truck at the existing fire station (Building 630). This will ensure a six-minute or shorter response time to fires and meet the service standard. In addition, install enough fire hydrants connected to the EBM/UD water line along Western Drive to ensure 1,500 gpm (5,700 lpm) of water pressure on the site.</p>	<p><b>Significant and Mitigable Impact</b></p> <p><i>Impact: Police and Fire Protection Services.</i> This impact and its mitigation are the same as under Alternative 1.</p>	<p><b>Significant and Mitigable Impact</b></p> <p><i>Impact: Police and Fire Protection Services.</i> This impact and its mitigation are the same as under Alternative 1.</p>
Cultural Resources	No significant impacts.	No impacts.	No significant impacts.	No significant impacts.	No significant impacts.



**TABLE ES-3**  
**SUMMARY OF SIGNIFICANT ENVIRONMENTAL IMPACTS AND MITIGATIONS UNDER CEQA (CONTINUED)**

Resource Area	NAVY ACTIONS		REUSE ALTERNATIVES		
	Navy Disposal	No Action	Alternative 1: Residential/Commercial	Alternative 2: Industrial/Commercial	Alternative 3: Recreation/Commercial
Biological Resources	No impacts.	No impacts.	No significant impacts.	No significant impacts.	No significant impacts.
Water Resources	No impacts.	No impacts.	No significant impacts.	No significant impacts.	No significant impacts.
Geology and Soils	No impacts.	No impacts.	<p><b>Significant and Mitigable Impact</b>  <i>Impact: Severe Seismic Ground Shaking.</i> New construction would meet current seismic standards contained in the Uniform Building Code (UBC), the California Division of Mines and Geology (CDMG) guidelines for evaluating seismic hazards, and the Safety Element of the General Plan. State law only requires seismic retrofitting of older unsafe buildings if they are to be used for municipal buildings. Therefore, older historic structures could be damaged in a large earthquake and pose a risk to people and structures. In addition, infrastructure components (utilities and roadways) could be damaged or destroyed.</p> <p><i>Mitigation:</i> Before reusing existing structures, perform the following:            (continued on next page)</p>	<p><b>Significant and Mitigable Impact</b>  <i>Impact: Severe Seismic Ground Shaking.</i> This impact and its mitigation are the same as under Alternative 1.</p>	<p><b>Significant and Mitigable Impact</b>  <i>Impact: Severe Seismic Ground Shaking.</i> This impact and its mitigation are the same as under Alternative 1.</p>

TABLE ES-3  
SUMMARY OF SIGNIFICANT ENVIRONMENTAL IMPACTS AND MITIGATIONS UNDER CEQA (CONTINUED)

Resource Area	NAVY ACTIONS		REUSE ALTERNATIVES		
	Navy Disposal	No Action	Alternative 1: Residential/Commercial	Alternative 2: Industrial/Commercial	Alternative 3: Recreation/Commercial
Geology and Soils (Cont.)			<ul style="list-style-type: none"> <li>Analyze and, if necessary, perform seismic upgrades of structures designated for reuse when rehabilitation occurs to minimize life safety risks from failures in large earthquakes. Do not reuse structures that cannot feasibly be retrofitted to meet a life safety objective.</li> <li>Inspect and retrofit to existing standards those utilities that are essential for maintaining emergency services or that could increase hazards (such as fire). Replace utilities that cannot be retrofitted or supplement them with backup systems.</li> </ul>		
Transportation, Traffic, and Circulation	No impacts.	No impacts.	<p><b>Significant and Mitigable Impacts</b>  <i>Impact 1: Unsafe Circulation.</i> The substandard condition of sections of Western Drive and the lack of access to Western Drive from eastbound I-580 would result in inadequate conditions to safely support the estimated traffic volumes under Alternative 1. While planned reuse of NFD Point Molate would result in improvements to Western Drive on site, the off-site road segment of Western Drive (between I-580 and the south entrance) do not conform to City standards.</p> <p><i>Mitigation 1.</i> Widen Western Drive between I-580 and the entrance to the NFD Point Molate property to conform to applicable City standards. Design Western Drive to be a two-lane roadway, with turn lanes, that accommodates bicyclists and pedestrians. Provide signs, appropriate striping, and roadway markings at I-580 and Western Drive to direct eastbound travelers on I-580 to Western Drive.</p> <p>(continued on next page)</p>	<p><b>Significant and Mitigable Impacts</b>  <i>Impact 1: Unsafe Circulation.</i> This impact and its mitigation are the same as under Alternative 1.</p>	<p><b>Significant and Mitigable Impacts</b>  <i>Impact 1: Unsafe Circulation.</i> This impact and its mitigation are the same as under Alternative 1.</p>

**TABLE ES-3**  
**SUMMARY OF SIGNIFICANT ENVIRONMENTAL IMPACTS AND MITIGATIONS UNDER CEQA (CONTINUED)**

Resource Area	NAVY ACTIONS		REUSE ALTERNATIVES		
	Navy Disposal	No Action	Alternative 1: Residential/Commercial	Alternative 2: Industrial/Commercial	Alternative 3: Recreation/Commercial
Transportation, Traffic, and Circulation (Cont.)			<p><i>Impact 2: Deterioration in LOS at the Westbound I-580/Richmond Parkway Intersection.</i> At build-out in 2020, Alternative 1 would degrade LOS at the westbound I-580/Richmond Parkway intersection to LOS E in the A.M. peak hour.</p> <p><i>Mitigation 2:</i> Re-stripe the southbound approach at the intersection of the I-580 westbound ramp and Richmond Parkway to one right-turn lane, one through lane, one shared through left-turn lane, and one left-turn lane (currently the configuration is one right-turn lane, two through lanes, and one left-turn lane). Approve and assure implementation of the re-striping of this intersection in consultation with the California Department of Transportation (Caltrans). This mitigation measure would improve the LOS to B.</p> <p>(continued on next page)</p>	<p><i>Impact 2: Deterioration in LOS at the Westbound I-580/Richmond Parkway Intersection.</i> By 2010, the westbound I-580/Richmond Parkway intersection is projected to deteriorate to LOS F during the A.M. peak hour. This is a conservative projection of the impact on this intersection for two reasons: (1) it is a non-standard signalized intersection that is only partially controlled, and (2) trip generation was based on land uses using the maximum floor-area ratio (FAR) permitted by the City of 0.50 (see the Traffic Assumptions in Chapter 2). If the actual FAR of development is closer to 0.30 (which is typical for the City), the LOS would likely remain acceptable.</p> <p><i>Mitigation 2:</i> Mitigation is the same as that identified for Alternative 1. Implementing this mitigation measure would improve LOS during the A.M. and P.M. peak hours to LOS B in 2010, reducing this impact to a less than significant level. In 2020, this mitigation measure would result in LOS C.</p>	<p>This impact is less than significant under Alternative 3.</p>

TABLE ES-3  
SUMMARY OF SIGNIFICANT ENVIRONMENTAL IMPACTS AND MITIGATIONS UNDER CEQA (CONTINUED)

Resource Area	NAVY ACTIONS		REUSE ALTERNATIVES		
	Navy Disposal	No Action	Alternative 1: Residential/Commercial	Alternative 2: Industrial/Commercial	Alternative 3: Recreation/Commercial
Transportation, Traffic, and Circulation (Cont.)			<p><i>Impact 3: Traffic Volumes on Richmond Parkway Ramps.</i> Freeway ramps with volumes of less than 1,500 vehicles per hour are considered by Caltrans to operate acceptably; ramps with volumes greater than 1,500 vehicles per hour require further analysis. The threshold would be exceeded on the Richmond Parkway westbound on-ramp in the A.M. peak hour.</p> <p><i>Mitigation 3.</i> Monitor the Richmond Parkway westbound on-ramp by conducting a traffic study for each phase of the project. Evaluate the impact of the development projections of traffic for the freeway ramp. If the threshold of 1,500 vehicles per hour is exceeded, conduct an operational analysis satisfying Caltrans requirements. If the operational analysis indicates an unacceptable operating condition, develop modifications to the ramp with the goal of reducing the vehicles per hour to less than 1,500.</p> <p>This is not an impact under Alternative 1.</p>	<p><i>Impact 3: Traffic Volumes on Richmond Parkway Ramps.</i> The Caltrans threshold of 1,500 vehicles per hour would be exceeded on the Richmond Parkway westbound on-ramp by 2010 during the A.M. peak hour and the Richmond Parkway eastbound off-ramp in 2020 during the P.M. peak hour.</p> <p><i>Mitigation 3.</i> Mitigation is the same as that identified for Alternative 1.</p>	<p><i>Impact 2: Traffic Volumes on Richmond Parkway Ramp.</i> The Caltrans threshold of 1,500 vehicles per hour would be exceeded on the Richmond Parkway westbound on-ramp during the A.M. peak hour.</p> <p><i>Mitigation 2.</i> Mitigation is the same as that identified for Alternative 1, Mitigation 3.</p> <p>This is not an impact under Alternative 3.</p>

**TABLE ES-3**  
**SUMMARY OF SIGNIFICANT ENVIRONMENTAL IMPACTS AND MITIGATIONS UNDER CEQA (CONTINUED)**

Resource Area	NAVY ACTIONS		REUSE ALTERNATIVES		
	Navy Disposal	No Action	Alternative 1: Residential/Commercial	Alternative 2: Industrial/Commercial	Alternative 3: Recreation/Commercial
Transportation, Traffic, and Circulation (Cont.)				<p><i>Mitigation 4:</i> Remove the channelization island separating traffic turning right from westbound Tewksbury Avenue onto northbound Richmond Parkway. Replace the free northbound through lane with a signal-controlled northbound lane. Modify the signal to control the northbound right-turn lane. Re-stripe the intersection to one right-turn lane and two left-turn lanes (currently the configuration is one right-turn lane and one left-turn lane). With mitigation, the intersection would operate at LOS A during the P.M. peak hour.</p>	This is not an impact under Alternative 3.
			<p>This is not an impact under Alternative 1.</p>	<p><i>Impact 5: Deterioration in LOS at the Eastbound I-580/Marine Street Intersection.</i> At full build-out in 2020, Alternative 2 is expected to adversely affect the I-580 eastbound ramp/Marine Street intersection, reducing the LOS from B to E in the P.M. peak hour. The significance of this impact depends on the timing of build-out of the project, as well as the ultimate density of development. This intersection would operate at an acceptable LOS D with the project in 2010; however, by 2020, the additional increment of regional growth would lead to a significant adverse impact. Because of the characteristics of the terrain and the geometry of the off-ramp, physical (widening) mitigation for this impact would not be feasible.</p> <p>(continued on next page)</p>	
					This is not an impact under Alternative 1.

TABLE ES-3  
SUMMARY OF SIGNIFICANT ENVIRONMENTAL IMPACTS AND MITIGATIONS UNDER CEQA (CONTINUED)

Resource Area	NAVY ACTIONS		REUSE ALTERNATIVES		
	Navy Disposal	No Action	Alternative 1: Residential/Commercial	Alternative 2: Industrial/Commercial	Alternative 3: Recreation/Commercial
Transportation, Traffic, and Circulation (Cont.)				<p>The analysis performed for this EIS/EIR is based on a Floor-Area-Ratio (FAR) of 0.50, which is the maximum permitted by the City. Typically, developments of the type envisaged build out with a FAR in the range of 0.30 to 0.35. If, as the community reuse plan is developed, a lower-than-maximum FAR is produced, it is unlikely that the significant negative impact projected by this analysis would occur.</p> <p><i>Mitigation 5.</i> Prior to approval of a project phase, require the project proponent to evaluate the impact of the additional development on this intersection. If a significant adverse impact is identified, require a reduced FAR so that the intersection operates at LOS D or better.</p>	
Air Quality	No impacts.	No impacts.	<p><b>Significant and Mitigable Impacts</b> <i>Impact 1: Objectionable Odors Associated with On-Site Activity.</i> Objectionable odors could result from commercial operations, light industrial operations, and wastewater treatment on the property. These odors could affect residents, occupants of commercial and industrial facilities, and visitors to the property. (continued on next page)</p>	<p><b>Significant and Mitigable Impacts</b> <i>Impact 1: Objectionable Odors Associated with On-Site Activity.</i> This impact and its mitigation are similar to that identified under Alternative 1, except that there would be less exposure because Alternative 2 does not propose residential uses. More odors could result from the light industrial operations.</p>	<p><b>Significant and Mitigable Impacts</b> This is not an impact under Alternative 3.</p>

**TABLE ES-3**  
**SUMMARY OF SIGNIFICANT ENVIRONMENTAL IMPACTS AND MITIGATIONS UNDER CEQA (CONTINUED)**

Resource Area	NAVY ACTIONS		REUSE ALTERNATIVES		
	Navy Disposal	No Action	Alternative 1: Residential/Commercial	Alternative 2: Industrial/Commercial	Alternative 3: Recreation/Commercial
Air Quality (Cont.)			<p><i>Mitigation 1.</i> Prior to issuance of any permit, evaluate objectionable odors from light industrial uses on a project-specific basis and implement appropriate odor controls and/or buffers. For uses involving potential objectionable odor sources, such as a winery, incorporate adequate odor controls into the project design or provide adequate buffer zones between residential and industrial developments. Objectionable odors from wastewater are a function of the treatment options. If on-site treatment is selected, design and site the plant to ensure that residents are not subject to objectionable odors from the plant or select off-site wastewater treatment.</p> <p><i>Impact 2: Consistency with BAAQMD CAP.</i> Alternative 1 would be inconsistent with the BAAQMD Clean Air Plan (CAP) because CAP trip control measures were not considered in the Reuse Plan.</p> <p><i>Mitigation 2.</i> Prior to approval of any discretionary project, integrate CAP trip control measures into specific project development proposals.</p>	<p><i>Impact 2: Consistency with BAAQMD CAP.</i> This impact and its mitigation are the same as under Alternative 1.</p>	<p><i>Impact: Consistency with BAAQMD CAP.</i> This impact and its mitigation are the same as under Alternative 1.</p>

TABLE ES-3  
SUMMARY OF SIGNIFICANT ENVIRONMENTAL IMPACTS AND MITIGATIONS UNDER CEQA (CONTINUED)

Resource Area	NAVY ACTIONS		REUSE ALTERNATIVES		
	Navy Disposal	No Action	Alternative 1: Residential/Commercial	Alternative 2: Industrial/Commercial	Alternative 3: Recreation/Commercial
Noise	No impacts.	No impacts.	<p><b>Significant and Mitigable Impacts</b></p> <p><i>Impact 1: Traffic Noise on Western Drive.</i> Daily average and peak-hour traffic noise associated with this alternative would exceed 60 on the A-weighted decibel scale (dBA) at distances within 100 feet (30 m) of the centerline of Western Drive.</p> <p><i>Mitigation 1.</i> Either provide new residential development with 100-foot (30-m) setbacks from the centerline of Western Drive, or incorporate structural sound attenuation features (e.g., sound walls or berms) to reduce traffic noise levels at residential parcels near Western Drive to less than 60 dBA during the peak traffic hour. In addition, consider incorporating traffic speed control measures to further reduce traffic noise levels.</p> <p><i>Impact 2: Construction and Demolition Noise.</i> Project construction and demolition activities have the potential for causing temporary disturbance to proposed adjacent residential land uses if those residential uses are developed and occupied before completion of other elements of Alternative 1.</p> <p><i>Mitigation 2.</i> Limit construction and demolition activities to daytime hours between 7 A.M. and 6 P.M. weekdays that are not holidays. Ensure that construction equipment and vehicles use mufflers to minimize noise and are tuned to meet Department of Motor Vehicle Standards.</p>	No significant impacts.	No significant impacts.



**TABLE ES-3**  
**SUMMARY OF SIGNIFICANT ENVIRONMENTAL IMPACTS AND MITIGATIONS UNDER CEQA (CONTINUED)**

Resource Area	NAVY ACTIONS		REUSE ALTERNATIVES		
	Navy Disposal	No Action	Alternative 1: Residential/Commercial	Alternative 2: Industrial/Commercial	Alternative 3: Recreation/Commercial
Utilities	No impacts.	No impacts.	<p><b>Significant and Mitigable Impacts</b>  <i>Impact 1: Sanitary Sewer System.</i> The NFD Point Molate sewage treatment plant does not have the capacity to handle the maximum wastewater load of 360,000 gpd (1,400,000 lpd) estimated for this alternative (Harding Lawson Associates 1999).</p> <p><i>Mitigation 1:</i> The City's Master Utility Plan considers three options to meet the sanitary sewer system needs of Alternative 1: (1) expand the existing sewage treatment plant or construct a new treatment plant and collection system on site; (2) treat some wastewater on site and haul the excess to the Richmond Municipal Sewer District plant for treatment, and (3) construct a new pipeline and pumping system that would transfer all the wastewater to the Richmond Municipal Sewer District plant.</p> <p><i>Impact 2: Water Distribution System.</i> The existing water distribution system does not have the capacity to serve the estimated need identified for this alternative.  (continued on next page)</p>	<p><b>Significant and Mitigable Impacts</b>  <i>Impact 1: Sanitary Sewer System.</i> This impact and its mitigation are the same as under Alternative 1, although the increased wastewater load would be greater than under Alternative 1.</p> <p><i>Impact 2: Water Distribution System.</i> This impact and its mitigation are the same as under Alternative 1, although potable water usage would be greater than under Alternative 1.</p>	<p><b>Significant and Mitigable Impacts</b>  <i>Impact 1: Sanitary Sewer System.</i> This impact and its mitigation are the same as under Alternative 1, although this alternative would have the least wastewater load among the three community reuse alternatives.</p> <p><i>Impact 2: Water Distribution System.</i> This impact and its mitigation are the same as under Alternative 1, although potable water usage would be the least among the three community reuse alternatives.</p>

**TABLE ES-3**  
**SUMMARY OF SIGNIFICANT ENVIRONMENTAL IMPACTS AND MITIGATIONS UNDER CEQA (CONTINUED)**

Resource Area	NAVY ACTIONS		REUSE ALTERNATIVES		
	Navy Disposal	No Action	Alternative 1: Residential/Commercial	Alternative 2: Industrial/Commercial	Alternative 3: Recreation/Commercial
Utilities (Cont.)			Mitigation 2: Replace and upgrade the water distribution system. Ensure that the distribution lines for drinking water meet East Bay Municipal Utility District standards and comply with American Water Works Association standards. Test the fire protection system and upgrade for adequate water pressure. Install individual water meters and integrate water conservation measures into building design and construction. Use equipment, devices, and methodologies that conserve water and provide for long-term efficient water use. Use drought-resistant or native plants, inert materials, and install minimal turf areas.		
Hazardous Materials and Waste	No impacts.	No impacts.	No significant impacts.	No significant impacts.	No significant impacts.

## ES.7 OTHER CONSIDERATIONS AND FEDERAL EXECUTIVE ORDERS

This section discusses other topics required by NEPA and/or CEQA.

### ES.7.1 Cumulative Impacts

Both NEPA and CEQA require an EIS/EIR to consider cumulative impacts when they are significant (40 C.F.R. § 1508.25[c] and CEQA Guidelines § 15064[i]). A cumulative impact is one caused by the action and "other closely related past, present, and reasonably foreseeable future projects" (40 C.F.R. § 1508.7 and CEQA Guidelines § 15355g). No significant cumulative effects were identified for Navy disposal, the community reuse alternatives, or the No Action Alternative.

### ES.7.2 Significant Unmitigable Adverse Impacts

Under NEPA and CEQA, an EIS/EIR must identify and describe any significant unmitigable adverse environmental impacts (impacts for which mitigation to less than significant levels is not feasible). Most issues addressed in this EIS/EIR would not result in significant unmitigable impacts. However, Alternative 1 would result in one significant unmitigable land use impact.

Under Alternative 1, residential use is proposed for the Southern, Central, and Northern Development Areas. All of the Southern Development Area and most of the Central and Northern Development Areas lie within the Alternate Release Scenario impact circle for ammonia as developed in Chevron's Risk Management Program. Because it would not be physically possible to provide an adequate buffer between sensitive receptors in these areas and the off-site sources of potential accidental release, introduction of residential uses in these areas would result in a significant unmitigable impact.

### ES.7.3 Short-Term Uses and Long-Term Productivity

NEPA requires that an EIS consider the relationship between short-term uses of the environment and the maintenance and enhancement of long-term productivity. Special attention is given to efforts that might limit the range of beneficial uses of the NFD Point Molate environment or pose long-term risks to health and safety.

The productivity of NFD Point Molate has been related to its operation as a naval fuel depot from 1943-1995 and, before that, as a large commercial winery (1907-1919). Ecological productivity is associated with the undeveloped hillsides and habitats on the property. The fuel depot generated a small number of jobs and associated economic activity. Navy also preserved the historic winery structures on the site. Short- and long-term uses associated with the community reuse alternatives include providing jobs/employment, increasing the City's housing stock (Alternative 1 only), and providing opportunities for recreational and publicly oriented uses. The open space to be preserved under all three community reuse alternatives would conserve the

environmental productivity of the site. The adaptive reuse and retention of listed or eligible structures on the National Register of Historic Places would also be a long-term benefit.

#### ES.7.4 Irreversible/Irretrievable Commitments of Resources

NEPA and CEQA require that an EIS/EIR consider the extent to which alternatives would result in primary and secondary effects that commit nonrenewable resources to uses that future generations probably would be unable to reverse.

Navy disposal of NFD Point Molate property and structures would increase options for reuse and for responsible long-term resource management. Implementing any of the community reuse alternatives would require commitments of both renewable and nonrenewable energy and material resources for demolition and construction associated with reuse. Equipment used during construction and demolition activities would use petroleum fuels, such as gasoline and diesel. This energy expenditure would occur over the short term and would not substantially increase the overall demand for electricity or natural gas.

Development of NFD Point Molate would result in a long-term increase in the annual amount of energy consumed at the property. New development would be required to comply with building energy consumption requirements under the California Code of Regulations, Title 24, Building Energy Efficiency Standards. Community reuse would result in a long-term commitment of land for development. It also would increase long-term consumption of water resources by new on-site uses and of gasoline and diesel through the generation of additional vehicle trips.

#### ES.7.5 Growth-Inducing Impacts (CEQA Only)

CEQA requires a discussion of the ways in which a proposed action and alternatives could spur economic growth, population growth, or housing development, either directly or indirectly, in the surrounding area. Induced growth, in contrast to the direct growth of employment, population, and housing resulting from a project, concerns the secondary growth associated with the proposed action. An action can also induce growth by removing or lowering barriers to growth or by creating amenities that attract new residents or increased economic activity. Analysis of growth-inducing effects includes those characteristics of the action that could encourage and facilitate activities that would, either individually or cumulatively, affect the environment. For example, improvement of access routes could encourage growth in previously undeveloped areas. Growth can be considered beneficial, adverse, or of no significance environmentally, depending on its secondary effects on the physical environment.

The community reuse alternatives could set a precedent for commercial uses on the San Pablo Peninsula. In addition, Alternative 1 would introduce residential uses on the

peninsula. Reuse would add wastewater treatment and natural gas service to the area, which could induce growth. However, because most of the land use on the peninsula is industrial, it is unlikely that reuse would induce changes in those land uses in the near future (beyond those currently being considered, e.g., the Red Rock Marina project). If reuse is successful, it could encourage nearby industrial uses along Western Drive to convert to commercial or residential uses.

#### ES.7.6 Environmental Justice

Executive Order 12898, Environmental Justice in Minority and Low-Income Populations, 3 C.F.R. 859 (1995), reprinted in 42 U.S.C. § 4321 note at 475-79, requires addressing the relative impacts of Federal actions on minority and low-income populations to avoid the placement of a disproportionate share of adverse impacts of these actions on these socioeconomic groups. None of the community reuse alternatives would have a disproportionate impact on minority or low-income populations.

The EIS/EIR analysis (Chapter 4) concludes that, with mitigation, there would be no significant impacts, except for one land use impact under one alternative. Under Alternative 1, residential use is proposed for the Southern, Central, and Northern Development Areas. Because all of the Southern Development Area and most of the Central and Northern Development Areas lie within the Alternate Release Scenario impact circle for ammonia (as developed in Chevron's Risk Management Program), introduction of residential uses in these areas would result in a significant unmitigable impact. However, it is unlikely that the potential residential population would be disproportionately minority, and no low-income housing has been proposed as part of the project. Therefore, the unmitigable impact associated with Alternative 1 would not have a disproportionate effect on minority or low-income populations.

#### ES.7.7 Protection of Children from Environmental Health Risks and Safety Risks

Executive Order 13045, Protection of Children from Environmental Health Risks and Safety Risks, 62 Fed. Reg. 19885 (1997), requires assessment of child-specific environmental health risk and safety risk issues. Navy disposal and the No Action Alternative would not result in any children using or accessing the site. Therefore, no disproportionate effects on children would occur.

Under the community reuse alternatives, children would reside at or visit the site. The largest concentration of children would be present in the residential areas under Alternative 1 and the recreational areas under Alternatives 2 and 3.

As discussed in Section 3.1.2, NFD Point Molate is within the "toxic or flammable endpoints" for accidental releases by Chevron Refinery and General Chemical Corporation under a Worst Case Scenario and an Alternative Release Scenario (Section 3.1), as assessed in conformance with the Risk Management Program Rule

(40 C.F.R. 68.130; Section 112(r) of the Clean Air Act). As discussed in Section 4.1.2, no residential uses would be allowed within the endpoints of an Alternate Release Scenario. However, under all community reuse alternatives, children could access areas within the endpoints for recreational purposes. Since children are less able to metabolize, detoxify, and excrete some toxic substances than adults (U.S. EPA 1998), in the event of an accidental release of substantial quantities of toxic contaminants, there could be disproportionate health and safety risks to children at NFD Point Molate. These risks would be greatest under Alternative 1 because residential development is proposed.

## ES.8 AGENCY COORDINATION

Federal, state, and local agencies were consulted before and during the preparation of this EIS/EIR. Agencies were notified of plans for closure and disposal activities by mailings; by scheduled public meetings associated with the reuse planning process; by publication of an NOI/NOP announcing preparation of the Draft EIS/EIR; and by a public hearing on the Draft EIS/EIR. The agencies' viewpoints were solicited with regard to activities within their jurisdictions.

## ES.9 AREAS OF CONTROVERSY

Navy and the City conducted an extensive public involvement and scoping process for this project. That process identified a number of issues of community concern, including the compatibility of proposed land uses with existing, adjacent land uses; preservation and protection of natural resources; transportation; and the preservation of historic resources.

502

503

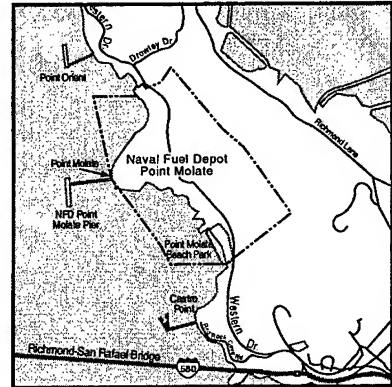
504

505

*This page intentionally left blank.*

---

# 1 Purpose and Need





---

## CHAPTER 1: PURPOSE AND NEED

### CONTENTS

Page

---

1.1	Federal Action .....	1-1
1.2	Local Action .....	1-2
1.3	Location and History .....	1-2
1.4	Document Organization .....	1-5
1.5	Related Process and Documentation.....	1-5
1.6	Public Involvement Process.....	1-6

## 1. PURPOSE AND NEED

This Environmental Impact Statement (EIS)/Environmental Impact Report (EIR) has been prepared in accordance with the National Environmental Policy Act of 1969 (NEPA), as amended, 42 United States Code (U.S.C.) §§ 4321-4370d; the Council on Environmental Quality implementing regulations for NEPA, 40 Code of Federal Regulations (C.F.R.) Parts 1500-1508 (1998); Department of Navy Environmental and Natural Resources Program Manual (U.S. Navy Operational Naval Instructions [OPNAVINST 5090.1B, CH-2, 1999]); the Defense Base Closure and Realignment Act of 1990 (DBCRA), as amended (10 U.S.C. § 2687 note at 582-606); and the California Environmental Quality Act of 1970 (CEQA), California Public Resources Code §§ 21000-21178.1 (West 1996 & Supp. 1999) statutes and guidelines.

NEPA and CEQA encourage the preparation of a joint environmental document when appropriate. To facilitate the requirements of NEPA for Department of the Navy (Navy) disposal and of CEQA for City of Richmond (City) reuse after disposal, Navy and the City have prepared this joint document. Navy is the lead agency under NEPA, and the City is the lead agency under CEQA. This document evaluates the reasonably foreseeable impacts on the human and natural environment that could result from Federal disposal of NFD Point Molate property and community reuse.

### 1.1 FEDERAL ACTION

The Federal action subject to NEPA is Navy disposal of Federal surplus property at the Fleet and Industrial Supply Center, Naval Fuel Depot Point Molate (NFD Point Molate) to facilitate economic redevelopment. Since 1988, the Department of Defense (DOD) has been reducing its basing and staffing requirements to match current force and structure plans. The identification of NFD Point Molate for closure is a result of that process. DBCRA established a process to close and realign military bases. As part of this closure process, the 1995 Base Realignment and Closure (BRAC) Commission recommended that the Secretary of Defense close the Point Molate Naval Refueling Station, Richmond, California (NFD Point Molate). The 1995 BRAC Commission recommendation was approved by President Clinton and accepted by the 104th Congress in October 1995. NFD Point Molate ceased its fuel storage and distribution mission in May 1995 and operationally closed on September 30, 1998. The property is currently in caretaker status.

DBCRA exempted the decision to close or realign military installations from NEPA (Section 2905(c) of DBCRA, 10 U.S.C. § 2687 note [1994]). However, effects of the Navy disposal action and potential community reuse of closed facilities are not exempt from analysis under NEPA. Other requirements under DBCRA and other Federal laws pertinent to the disposal and reuse of NFD Point Molate include the following:

- Environmental restoration of the property, as soon as possible, with the funds made available for such restoration.
- Consideration of the local community's reuse plan prior to disposal of the property.
- Compliance with specific Federal property disposal laws and regulations.

Navy will use this document to fulfill its NEPA requirements in making disposal decisions for NFD Point Molate. Following the completion of the final document, Navy will issue its Record of Decision (ROD). If the decision is to transfer the property out of Federal ownership, the property can be conveyed to the City or other acquiring entities after the ROD has been issued.

## 1.2 LOCAL ACTION

The local action is community reuse of the NFD Point Molate property upon disposal, in accordance with the approved local reuse plan for the property. The local reuse plan is the Draft *Point Molate Reuse Plan* (Draft Reuse Plan) (City of Richmond 1997a), adopted by the Richmond City Council in April 1997. The City would become the primary jurisdiction responsible for future land use planning for the NFD Point Molate property upon disposal from Federal ownership.

The City will use this document to fulfill its CEQA requirements and in its consideration of necessary general plan amendments, specific plans, planned developments, and/or rezoning of the area resulting from the implementation of the Draft Reuse Plan.

Following the completion of the final CEQA document, the City will certify the EIR as complete and adequate. The Richmond City Council will adopt findings and a Mitigation and Monitoring Reporting Program and will issue a Notice of Determination (NOD) upon certification of this EIR.

## 1.3 LOCATION AND HISTORY

NFD Point Molate is located on the western shoreline of San Pablo Peninsula, next to San Francisco Bay (Bay) in Richmond, California (Figures 1.2-1 and 1.2-2). The property consists of about 413 acres (167 hectares [ha]), with about 313 acres (127 ha) of dry land and 100 acres (40 ha) of submerged land. The near-shore area is relatively flat, but the majority of the property slopes upward away from Bay waters, east toward Potrero Ridge at an elevation of up to nearly 400 feet (190 meters). The NFD Point Molate property was originally developed in 1907 as a large winery and company town, Winehaven, which closed in 1919. In 1942, Navy acquired the Winehaven property and developed it for the storage and distribution of fuel for the Pacific Fleet.

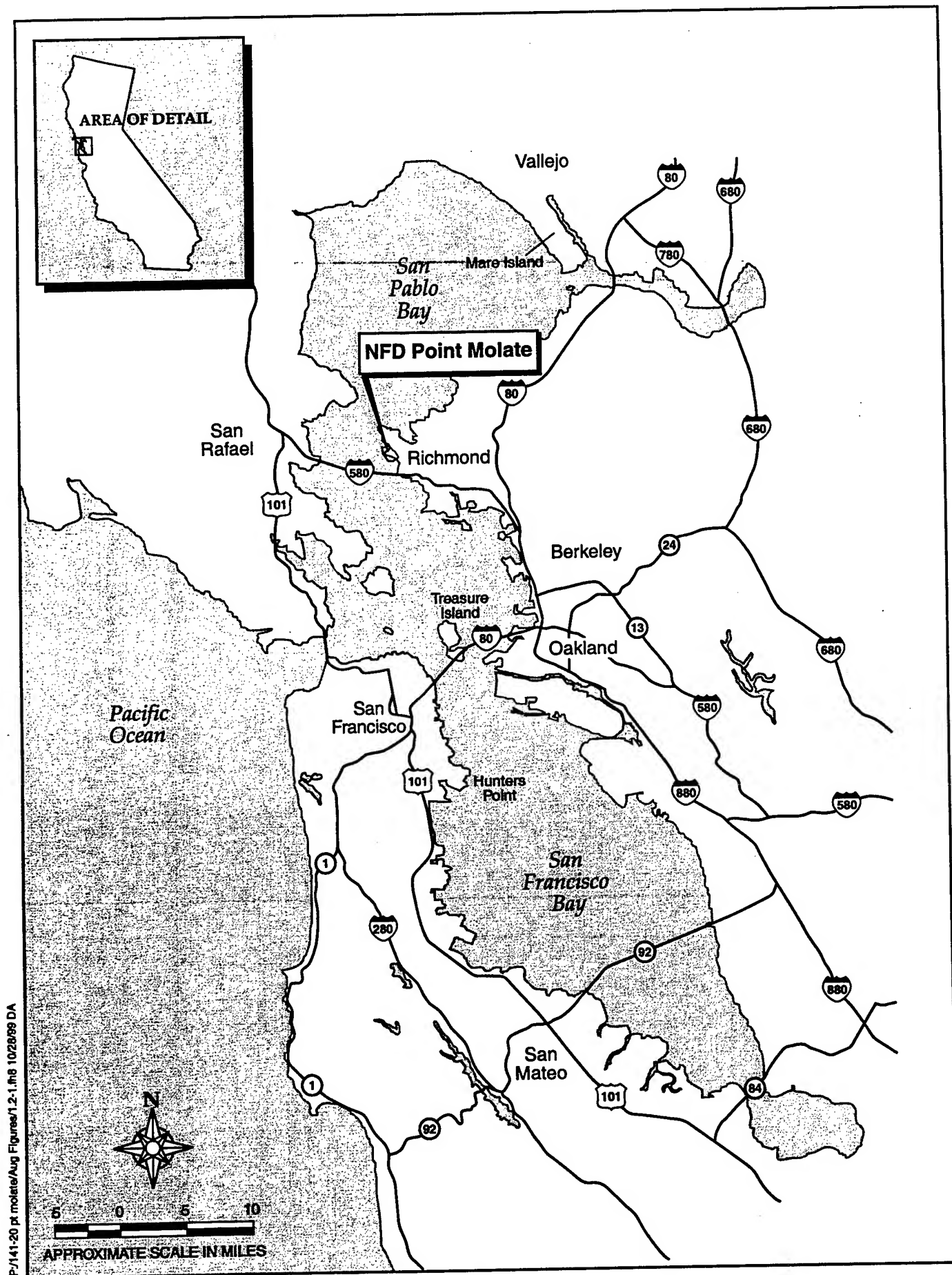


Figure 1.2-1: Area Map of NFD Point Molate

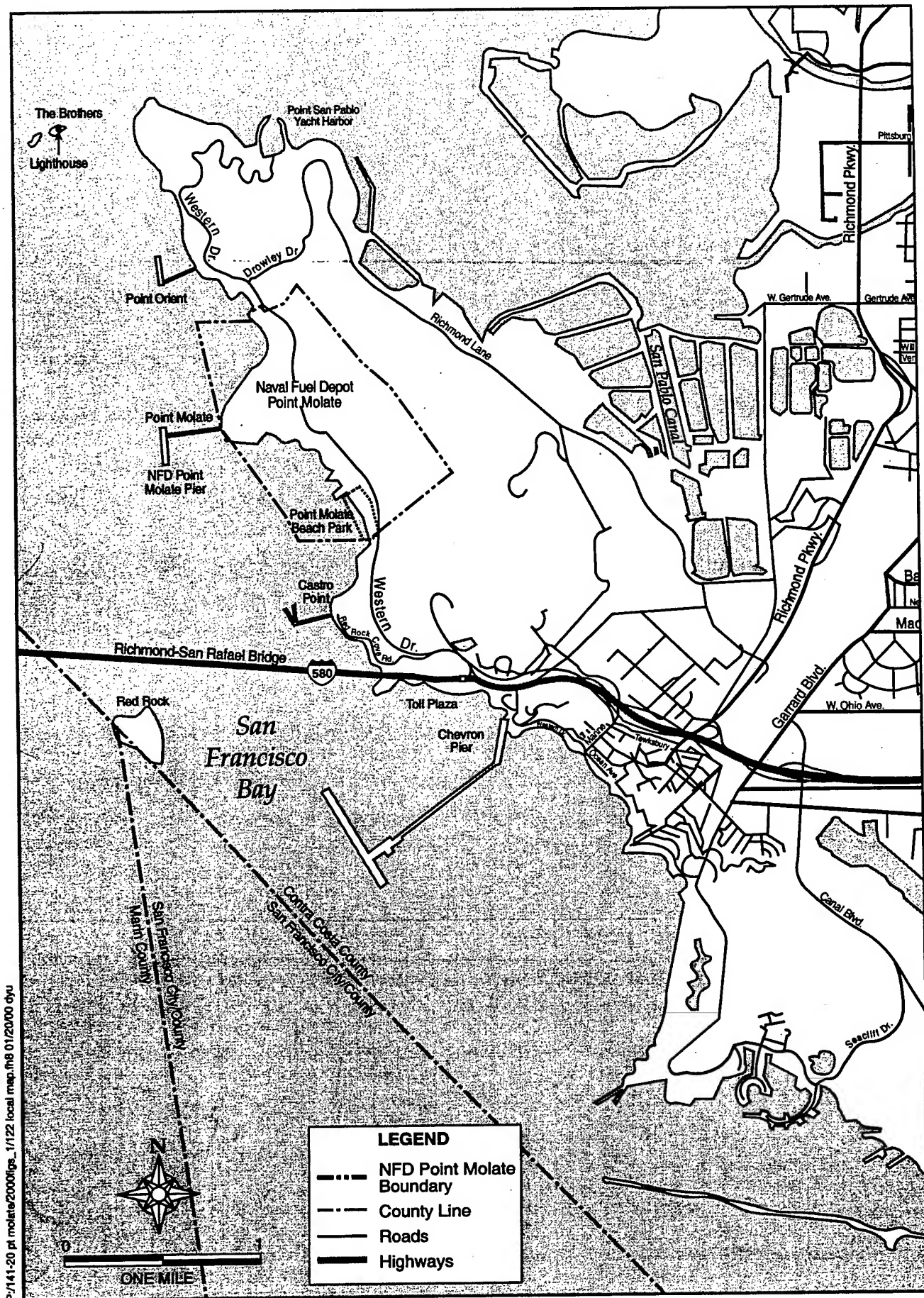


Figure 1.2-2: Local Map of NFD Point Molate

## 1.4 DOCUMENT ORGANIZATION

This document consists of an executive summary, seven chapters, and appendices. The executive summary provides an overview of the document and the conclusions of the environmental analysis. Chapter 1 provides introductory information about the proposed action of disposal and reuse, the development of this document, and the public involvement process. Chapter 2 describes the alternatives to be analyzed. Chapter 3 describes the existing setting for the resource areas that could be affected by the proposed action and alternatives, as well as discussions of relevant laws, plans, and policies for each resource area. Chapter 4 discusses the potential significant impacts on significant resources at the property from the proposed disposal and community reuse alternatives, as well as the No Action Alternative. Chapter 4 also identifies mitigation measures intended to reduce or eliminate identified significant environmental impacts. Chapter 5 discusses other considerations required by NEPA, CEQA, or both. It also includes a discussion of Executive Order (E.O.) 12898 regarding environmental justice and E.O. 13045, addressing protection of children from environmental health risks and safety risks. Chapter 6 lists the lead agency contacts, preparers of the EIS/EIR, persons contacted during the preparation of the document, and the document distribution list. Chapter 7 contains the references used for the EIS/EIR. The appendices provide supporting technical information used to prepare the document.

## 1.5 RELATED PROCESSES AND DOCUMENTATION

### 1.5.1 Navy Disposal

The disposal process for NFD Point Molate is regulated by DBCRA and the Federal Property and Administrative Services Act of 1949, 40 U.S.C. §§ 471-544, and its implementing regulations, the Federal Property Management Regulations (FPMR), 41 C.F.R. Chapter 101 (1998). The Base Closure Community Assistance Act of 1993 (Public Law [Pub. L.] No. 103-160, Title XXIX, Subtitle A) and the Base Closure Community Development and Homeless Assistance Act of 1994 (Pub. L. No. 103-421, 108 Stat. 4346) amend DBCRA and also contain self-standing provisions and amendments to other legal authorities for base closure and reuse. Navy must also comply with other laws and regulations.

### 1.5.2 Property Screening

Pursuant to FPMR, Navy completed the DOD and Federal property screening process for NFD Point Molate on December 4, 1995. No DOD or other Federal agency expressed an interest in acquiring the property. Screening for homeless assistance has also been completed. The City and a coalition of homeless providers negotiated a cooperation agreement to provide support to homeless parties from West Contra Costa County. The

cooperation agreement was approved by the U.S. Department of Housing and Urban Development in October 1998 (letter reproduced in Appendix A).

### 1.5.3 Methods of Conveyance

Under FPMR and DBCRA, Navy may convey properties through any of the following: a public benefit conveyance; negotiated public sale; or economic development conveyance as a BRAC-listed base. Navy may also dispose of NFD Point Molate under the authority of Section 2834(b) of the National Defense Authorization Act for Fiscal Year 1993, Public Law 102-484, as amended by Section 2833 of the National Defense Authorization Act for Fiscal Year 1994, Public Law 103-160, Section 2821 of the National Defense Authorization Act for Fiscal Year 1995, Public Law 103-337, and Section 2867 of the National Defense Authorization Act for Fiscal Year 1996, Public Law 104-106. Section 2867 of Public Law 104-106 authorizes the Secretary of the Navy to convey certain property (NFD Point Molate) associated with the Fleet and Industrial Supply Center at Oakland to the City of Richmond. This authority is independent of DBCRA and the Federal Property and Administrative Services Act of 1949 and its implementing regulations, the FPMR.

### 1.5.4 Related Studies

The major planning and restoration programs at NFD Point Molate are summarized below, including the Environmental Baseline Survey (EBS), Installation Restoration Program (IRP), and BRAC Cleanup Plan (BCP).

Areas of contamination have been identified in the EBS for NFD Point Molate (U.S. Navy 1996h). Two major environmental restoration programs (IRP and the Compliance Program) have been established in response to releases of hazardous substances, pollutants, contaminants, petroleum hydrocarbons, and hazardous and solid waste. The IRP identifies, assesses, characterizes, and cleans up or controls contaminants from past hazardous waste disposal operations and hazardous materials spills. The Compliance Program addresses underground storage tanks, aboveground storage tanks, asbestos-containing materials, polychlorinated biphenyls, and lead-based paint. Navy has prepared a BCP (U.S. Navy, 1996f), which provides information concerning the status of, and strategies for, the cleanup of NFD Point Molate.

## 1.6 PUBLIC INVOLVEMENT PROCESS

### 1.6.1 Introduction

Both NEPA and CEQA require that the public be involved in and informed of proposed actions and their potential environmental consequences. Public opportunities to comment on and participate in the process during preparation of this document are outlined below. Public notification is designed to include a full spectrum of area



residents and community organizations. The comments from agencies and the public associated with the Navy disposal and community reuse of NFD Point Molate property are important in identifying the environmental concerns addressed in this document. Appendix B contains public involvement materials.

Methods to involve the public during preparation of this document include the following:

- Publishing national public notices in the Federal Register. The public was notified of the Navy's/City's intent to prepare this document by a joint Notice of Intent/Notice of Preparation (NOP) published on September 15, 1997, in the Federal Register (Volume 62, Number 178) and by the filing of a NOP with the California Governor's Office of Planning and Research. The public comment period ended on October 17, 1997.
- Holding a public scoping meeting. The meeting was held on October 1, 1997.
- Providing a 45-day public comment period for the Draft EIS/EIR.
- Holding a public meeting to receive comments on the Draft EIS/EIR during the public comment period. (Please see the transmittal letter accompanying this document for the date, time, and location).
- Publishing local public notices of hearings, mailing public announcements, and coordinating media coverage and press releases.
- Maintaining a mailing list to distribute information.

#### 1.6.2 Scoping Process

The purpose of scoping is to identify potential environmental concerns regarding disposal and reuse for consideration in this document. Scoping includes the dissemination of information to the public and agencies and noticing public meetings in the Federal Register, in local newspapers, and by direct mail.

Press releases were sent to the news media, and notices were published in three local newspapers, the *West Contra Costa Times* (September 27 and 28, 1997), the *Oakland Tribune* (September 27 and 28, 1997), and the *Richmond Post* (September 24 and 28, 1997). Letters announcing a scoping meeting, including a summary of reuse alternatives, were mailed to public agencies, public interest groups, and interested individuals. A public scoping meeting was held at Richmond City Hall on October 1, 1997, to receive oral and written comments. Thirty-five people attended the scoping meeting, including agency representatives and members of the public. During the scoping period, seven letters were received. The City and Navy considered all comments received during the scoping period in the preparation of this document.



The environmental concerns expressed during the scoping period were related to natural and biological resource identification and protection, cultural resource protection, transportation and traffic, land use compatibility, and site remediation.

### **1.6.3 Summary of Scoping Issues**

The comments and concerns received during the scoping period are summarized below.

#### ***Draft Reuse Plan Alternatives***

East Bay Regional Park District (EBRPD) commented that the document should add an alternative that reflects the adopted Draft Reuse Plan.

*Response.* The three community reuse alternatives in this document are based upon the Draft Reuse Plan. See Chapter 2. Alternative 1 most closely reflects full implementation of the Draft Reuse Plan.

#### ***Compatibility of Proposed Land Uses with Existing Land Uses***

Several respondents commented that the compatibility of land uses with surrounding land uses should be assessed along with consideration of the consistency with adopted plans and policies.

*Response.* See Land Use, Sections 3.1 and 4.1.

#### ***Preservation and Protection of Natural Resources***

Several respondents commented on natural resources and the need to provide adequate protection.

*Response.* See Biological Resources, Sections 3.6 and 4.6.

#### ***Environmental Remediation***

Several respondents commented on environmental remediation of the site for reuse.

*Response.* See Hazardous Materials and Waste, Sections 3.13 and 4.13.

#### ***Transportation Analysis***

The California Department of Transportation commented that a traffic analysis should be completed to assess the impacts on Interstate 580, its interchange with Western Drive, and all affected streets and controlling intersections.

*Response.* See Transportation, Traffic, and Circulation, Sections 3.9 and 4.9.

212      ***Public Trust Lands***

213      The California State Lands Commission commented on the status of tidal and  
214      submerged lands at the facility.

215      *Response.* See Land Use, Sections 3.1 and 4.1.

216      ***Passenger Ferry Service***

217      Several respondents commented on the appropriateness or feasibility of a ferry service.

218      *Response.* See Transportation, Traffic, and Circulation, Sections 3.9 and 4.9.

219      ***Golf Course***

220      Several respondents commented that an 18-hole golf course was not appropriate.

221      *Response.* See Alternatives, Section 2.5.

222      ***Land Ownership***

223      EBRPD commented that the ownership of the right-of-way for the Richmond Belt Line  
224      railroad, proposed as a spur of the San Francisco Bay Trail, should be verified.

225      *Response.* The question of ownership of the right-of-way is not an environmental issue  
226      and is not addressed in this document.

227      ***Public Services and Utilities***

228      One respondent commented on the adequacy of public services and utilities.

229      *Response.* See Public Services, Sections 3.4 and 4.4, and Utilities, Sections 3.12 and 4.12.

230      ***Micropropagation Facility***

231      A non-profit organization commented that they were committed to development of a  
232      micropropagation facility with public educational value.

233      *Response.* This could be considered a commercial land use under any of the reuse  
234      alternatives (see Alternatives, Chapter 2).

235      ***Light Industrial Reuses***

236      Several respondents commented on the term "industrial," its definition (i.e., light versus  
237      heavy industrial), and the associated environmental consequences.

238      *Response.* See Alternatives, Section 2.4.

239 *Siting of an Amphitheater*

240 Several respondents commented on the appropriate siting of the amphitheater proposed  
241 in the reuse alternatives.

242 *Response.* This could be considered a recreation/open space land use (see Alternatives,  
243 Chapter 2).

244 *Vegetation Management Plan*

245 One respondent commented on the need for vegetation and erosion control, as well as  
246 the enhancement of wildlife values.

247 *Response.* See Biological Resources, Sections 3.6 and 4.6.

248 *Historic District*

249 One respondent commented on the preservation of designated elements on the National  
250 Register of Historic Places.

251 *Response.* See Cultural Resources, Sections 3.5 and 4.5.

252 *Visual Resources*

253 One respondent commented on visual resources and the need for this issue to be  
254 discussed in the document.

255 *Response.* See Visual Resources, Sections 3.2 and 4.2.

256 *Consideration of the "Wickland Project"*

257 One respondent commented that the effects of the "Wickland Project," off the shore of  
258 Point Molate, should be considered in the document.

259 *Response.* The Wickland Project application has been withdrawn from the California  
260 Public Utilities Commission and is not addressed in this document.

261 *Arts and Culture*

262 One respondent commented that arts and culture should be addressed.

263 *Response.* See Alternatives, Chapter 2. Arts and culture are considered commercial land  
264 uses, which are discussed in Chapters 3 and 4 of this document.

265 **1.6.4 Public Review**

266 *Draft Document*

267 The public is invited to review and comment on this document. The following steps  
268 have been taken to notify the public and other interested parties that the document is

269 available for review and comment and to announce the beginning of the 45-day  
270 comment period.

271 A notice of availability of the document was published in the Federal Register, and  
272 public notices and/or documents were distributed.

273 A Notice of Completion (required under CEQA) was filed with the Governor's Office of  
274 Planning and Research State Clearinghouse.

275 The public and concerned agencies and groups are invited to send written comments on  
276 this draft document to the following addresses:

277 Southwest Division  
278 Naval Facilities Engineering Command  
279 1230 Columbia Street, Suite 1100  
280 San Diego, CA 92101  
281 Attn: Mr. Robert Montana  
282 Phone: (619) 532-0942  
283 Fax: (619) 532-0940

284 And

285 City of Richmond Redevelopment Agency  
286 330 25<sup>th</sup> Street  
287 Richmond, CA 94804  
288 Attn: Mr. Gary Hembree  
289 Phone: (510) 307-8140  
290 Fax: (510) 307-8149

291 A public hearing will be held during the 45-day public review period to hear comments  
292 on this draft document. The time and place of the hearing is noted in the transmittal  
293 letter accompanying this document and will be announced in the media.

294 ***Final Document***

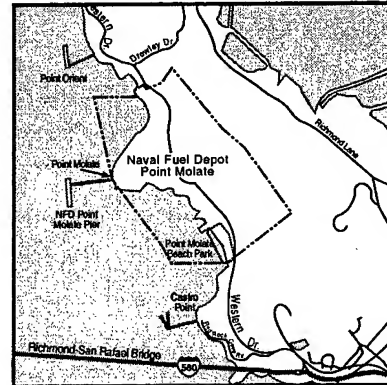
295 A final document, which incorporates and responds to comments received on the draft  
296 document, will be furnished to persons registering official comment on the draft  
297 document and to others requesting a copy. A Notice of Availability of the final  
298 document will be published in the Federal Register and in public notices and press  
299 releases.

300 As required under NEPA, there is a 30-day waiting period after the Notice of  
301 Availability is published in the Federal Register. During this period, the public may  
302 comment on the adequacy of responses to comments and on the final document. After  
303 the 30-day waiting period, a NEPA ROD can be signed.

304 To comply with CEQA, a NOD would be filed after the City approves a discretionary  
305 action related to the project (e.g., certification of this EIR, acceptance of the property  
306 from Navy, a City of Richmond General Plan amendment, etc.). As required under  
307 CEQA, mitigation measures would be included in a Mitigation Monitoring and  
308 Reporting Program as appropriate. The City also would prepare findings with respect  
309 to adoption of an alternative and mitigation measures. Should any plan approved by  
310 the City have significant unavoidable environment impacts, a statement of overriding  
311 considerations is required by CEQA.

---

## 2 Alternatives, Including the Proposed Action



---

## CHAPTER 2: ALTERNATIVES, INCLUDING THE PROPOSED ACTION

---

CONTENTS	Page
2.1 Introduction.....	2-1
2.2 Disposal Alternatives.....	2-2
2.3 Development of the Community Reuse Alternatives.....	2-2
2.4 Description of Alternatives.....	2-3
2.5 Alternatives Considered But Eliminated.....	2-13
2.6 Project Approval Requirements .....	2-14
2.7 Environmentally Preferable (NEPA)/Environmentally Superior (CEQA) Alternative .....	2-15
2.8 Comparison of Alternatives.....	2-15

## 2. ALTERNATIVES, INCLUDING THE PROPOSED ACTION

### 2.1 INTRODUCTION

This chapter describes the disposal action, the process the community used to develop a reuse plan, the selection criteria for reuse alternatives, and the reuse alternatives considered in this Environmental Impact Statement/Environmental Impact Report (EIS/EIR). Reuse alternatives that were considered but eliminated from detailed consideration also are described. A summary of significant impacts and mitigation for each alternative is provided in Table 2.8-1 and Table 2.8-2 at the end of this chapter.

Both the National Environmental Policy Act (NEPA) and the California Environmental Quality Act (CEQA) require that an action proponent objectively evaluate a "reasonable" range of alternatives. Under NEPA, reasonable alternatives are those that are practical or feasible from a technical and economic perspective and are based on common sense (46 Federal Register (Fed. Reg.) 18026, as amended, 51 Fed. Reg. 15618). According to the CEQA Guidelines, "...an EIR shall describe a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives" (California Code of Regulations, Title 14 §15126.6(a)). Under CEQA, the factors that can determine feasibility are site suitability, economic limitations, availability of infrastructure, general plan consistency, other plan or regulatory limitations, and jurisdictional boundaries. An EIR need not consider an alternative whose effects cannot be reasonably ascertained and whose implementation is remote and speculative. In addition, NEPA requires the evaluation of a No Action Alternative, and CEQA requires the evaluation of a No Project Alternative.

This chapter of the EIS/EIR is organized into eight primary sections. Section 2.2 discusses the Department of the Navy (Navy) disposal alternatives. Section 2.3 describes the development of reuse alternatives by the Local Redevelopment Authority (LRA). Section 2.4 provides detailed descriptions of the alternatives evaluated in this EIS/EIR. Alternatives eliminated from review in this EIS/EIR, and the reasons for their elimination, are addressed in Section 2.5. Section 2.6 describes project approval requirements, and Section 2.7 identifies the environmentally preferable/ environmentally superior (NEPA/CEQA) alternative. A summary comparison of the potential significant impacts and corresponding mitigation for each alternative is provided in Section 2.8.



## 2.2 DISPOSAL ALTERNATIVES

Navy can either retain the Fleet Industrial Supply Center, Naval Fuel Depot Point Molate (NFD Point Molate) excess real and related personal property in Federal ownership (No Action Alternative) or dispose of the property for subsequent reuse (Disposal Alternative). The description of retaining NFD Point Molate in Federal ownership is included in the No Action Alternative (Section 2.4.5).

Navy disposal is the Federal action evaluated to determine potential environmental impacts associated with disposal of about 413 acres (167 hectares [ha]) of Navy property from Federal ownership. Therefore, Navy disposal is assumed as part of each reuse alternative.

## 2.3 DEVELOPMENT OF THE COMMUNITY REUSE ALTERNATIVES

### 2.3.1 Introduction

The Base Closure Community Assistance Act of 1993, 10 United States Code (U.S.C.) § 2687 note at 573-77, directs the Secretary of Defense to recognize an LRA to plan for community reuse of military properties commissioned for closure under the Defense Base Closure and Realignment Act of 1990 (DBCRA), 10 U.S.C. § 2687 note at 582-606. Under DBCRA, Navy is required to treat the LRA's reuse plan as part of the proposed Federal action (§ 2907 (b)(7)(L)(iv)II) of Public Law No. 101-510 as amended, codified at 10 U.S.C. § 2687 note).

On behalf of the Secretary of Defense, the Office of Economic Adjustment of the Department of Defense (DOD) recognized the City of Richmond (City) as the LRA responsible for developing and implementing a community reuse plan for NFD Point Molate. The intent of a community reuse plan is to allow for an efficient transition from military use to civilian use. The LRA works with Federal and state agencies to resolve differences in reuse goals and to ensure implementation of Federal and state requirements in reuse plans. The LRA also works with Navy to establish the timing, conveyance, and financing mechanisms for disposal. The City established the Richmond City Council as the LRA in September 1995.

### 2.3.2 Community Reuse Planning

In accordance with processes suggested by DOD, as well as the City's own policies, the LRA established a 45-member Blue Ribbon Advisory Committee (Committee) in October 1995 to help prepare the reuse plan for the NFD Point Molate property. The Committee was composed of representatives from a variety of interest groups in the local community and had four subcommittees: Environmental; Development Standards, Cultural and Education; Recreation and Open Space; and Marketing and Economic Development. The City provided opportunities for the public to participate

in the reuse planning process through advertised workshops, site visits, distribution of planning materials, and a public review process. The Committee completed a draft Land Use Concept Paper for the NFD Point Molate property in early November 1996. This led to a workshop, held on November 18, 1996, where a preferred conceptual land use alternative was identified and used as a foundation for the formulation of a reuse plan. The Committee established the preferred alternative as a mixed-use historical village centered around a winery, with a retreat center, educational and job training facilities, housing, and light industrial use. The criteria selected by the Committee in evaluating the alternatives included the following:

- Preservation of open space and visual quality
- Long term economic viability
- Promotion of public access and use
- Ability to attract regional interest
- Compatibility with other proposed uses
- Promotion of historic legacy or use
- New jobs creation
- Minimal environmental impacts, especially biological
- City revenue generation
- Encourages a mix of uses

The Richmond City Council adopted the Draft *Point Molate Reuse Plan* (Draft Reuse Plan) (City of Richmond 1997a) in April 1997. The Draft Reuse Plan is a general planning level document that is designed to serve as a guide for future reuse and development of the NFD Point Molate property. The Draft Reuse Plan identifies conceptual land uses for the property that balance economic needs with community goals and objectives. The Draft Reuse Plan's vision is to recreate the vitality, commerce, and activity reminiscent of the property's past as a winery village. The land use program for the NFD Point Molate property was designed with the flexibility to respond to changing market demand.

## 2.4 DESCRIPTION OF ALTERNATIVES

### 2.4.1 Overview

The Draft Reuse Plan describes a broad range of development types and intensities for the NFD Point Molate property. These development opportunities were combined to form three separate and distinct alternatives that maintain consistency with the goals and objectives of the Draft Reuse Plan. The community reuse alternatives for NFD Point Molate are Residential/Commercial (Alternative 1), Industrial/Commercial

(Alternative 2), and Recreation/Commercial (Alternative 3). The three community reuse alternatives vary with regard to the amount and type of development proposed, as described below.

Alternative 1 includes all the land uses described in the Draft Reuse Plan (see Appendices C and D). Alternatives 2 and 3 are consistent with the Draft Reuse Plan and are variations on Alternative 1. NEPA requires that the lead agency for the EIS identify a preferred alternative. Alternative 2 is the preferred alternative.

The land uses proposed in the Draft Reuse Plan are founded on a number of concepts. Specifically, the land uses were developed in response to the following:

- Goals and objectives developed by the LRA (City local reuse authority) for NFD Point Molate.
- Opportunities and constraints of existing resources on the property.
- Preliminary market assessment of demand for potential land uses.

The Draft Reuse Plan states: "The Historic District is the central focus of NFD Point Molate and provides the themes for reuse and the appearance for development...It is in the village core of the Historic District and immediate surrounding area where use will be the most diverse, intensive, and publicly oriented...The historical village core will be supported by the Shoreline Park and hillside open space which will visually dominate the site...New development will be nestled amid the hills."

Descriptions of the thematic concepts contained in the Draft Reuse Plan that are relevant to understanding the development of the community reuse alternatives are given below:

***Preservation of Historic Resources.*** "...Point Molate's historical period as a winery is preserved in its architectural character. The architecture of the main, three-story Winehaven building is unique to the Bay Area, if not the country at large, for it resembles a Rhineland castle with its red brick crenelated parapet and corner turrets...This historical period...is the inspiration and theme of reuse for NFD Point Molate. The reuse vision emphasizes public visitation to the Winehaven building, support facilities, and to the site itself. The intent is to capture that portion of the tourism market directed at visitors who have time only to visit places of interest within the immediate Bay Area. In this way, the City will generate regional interest in the little known historical site and increase public access...Other historical periods will be interpreted ...including the early occupation of the site by Native Americans and Chinese shrimpers, and the post winery Naval operation as a fuel depot."

*Mixed Use Village.* "The winery will be supported and supplemented by a mix of other uses, not unlike the original rural village. Historical buildings will be shared by a combination of winery, commercial entertainment, cultural, educational, and overnight uses. Recreational, residential and special light industrial uses will be accommodated elsewhere on the site as new development...If development of residential use is selected, it will be sited and designed to reinforce the village concept and complement public use of the site without creating a perception that the site is privately owned. To reinforce the village concept and the existing architectural style and scale of development, new buildings will retain a small-scale, reinforcing the sense of a town with buildings sited along a main street, and in campus-like clusters determined by site topography and related use. New construction will be compatible with the existing architectural vernacular, and will "borrow" similar architectural features and materials."

*Preservation of Open Space and Visual Resources.* "To provide local and regional recreational opportunities, attract visitors from around the Bay Area as well as from Richmond, protect the scenic quality of the site, and promote the site as a western gateway to the City of Richmond, more than two-thirds of the site will be preserved as open space and parkland in the highly visible hillsides and along the 1.4 miles of shoreline. Development will be limited to the low-lying, relatively level portions of the site. Most of the facilities and use areas will be oriented to the waterfront and views of the Bay."

*Promotion of Public Access and Use.* "A network of recreational trails will provide access to the hillsides and will be linked to the Bay Trail and promenade along the shoreline. The pier will be renovated to provide access by private boat, and possibly some sort of ferry service. Commercial recreation facilities will be allowed on and around the pier. A waterfront park with both interpretive and traditional facilities will be located at the base of the pier. Other outdoor visitor attractions may include a public plaza, amphitheater, and a publicly-oriented agricultural enterprise. Indoor attractions will include the winery and associated functions such as a museum, performing arts center, restaurant and bar, retail shops, and retreat facilities."

To implement these thematic concepts, the Draft Reuse Plan established a range of land uses for various parts of NFD Point Molate. The land uses, with associated development intensities, are shown in Table 2 of the Draft Reuse Plan (Appendix C, page I-32). The information from this table is the basis for the range of community reuse alternatives. The land use elements and development acreages associated with the three community reuse alternatives are shown in Appendix D, Table D-1. Table 2.2-1 below summarizes the information in Appendix D.

TABLE 2.2-1

## LAND USES UNDER NFD POINT MOLATE REUSE ALTERNATIVES

LAND USE	ALTERNATIVE 1: RESIDENTIAL/ COMMERCIAL		ALTERNATIVE 2: INDUSTRIAL/ COMMERCIAL		ALTERNATIVE 3: RECREATION/ COMMERCIAL	
	BUILDABLE SQ. FEET	ACRES	BUILDABLE SQ. FEET	ACRES	BUILDABLE SQ. FEET	ACRES
Commercial	175,967	27	175,967	27	160,903	27
Light Industrial <sup>1</sup>	97,474	6	1,346,233	61	213,670	8
Residential <sup>2</sup>	1,095,696 (730 units)	55	0	0	0	0
Open Space/Recreation, including 100 acres of submerged land	N/A	325	N/A	325	N/A	378
Totals	1,369,137	413	1,522,200	413	374,573	413

Source: City of Richmond 1997a.

<sup>1</sup> Calculation of floor area assumes a floor-area ratio of 0.5 (i.e., Industrial/Office Flex/920 from City General Plan).

<sup>2</sup> Each residential unit is assumed to be about 1,500 square feet in size.

N/A = Not Applicable

### Land Use Categories

The development activities presented in the Draft Reuse Plan are categorized into four land use categories based on the thematic descriptions (discussed above) and spatial distribution of uses presented in the Draft Reuse Plan (Appendices C and D).

**Commercial:** This category includes mixed-use developments, primarily retail and tourism-related, that could occur in the village area of the historic district: retail shops, wine shops, restaurants, bed and breakfast establishments, small hotels, recording studios, museums, performing art centers, conference centers, retreat accommodations, office space, job-training facilities, and classrooms or labs.

**Light Industrial:** This category includes production and distribution activities that could occur in combination with commercial development in the village area and as an alternative to residential development: manufacturing, sales, and distribution businesses that provide retail, food/wine products, and electrical/electronic equipment and parts. Also could include wholesale services, warehousing, trucking and courier services, equipment leasing, printing and publishing, data processing, telecommunications, and research and development.

**Residential:** This category represents the single-family or multifamily housing that could be developed in three areas of the property: apartments and one- to two-family

dwelling units, apartments over commercial units in mixed-use areas, and live/work units, such as artist studios.

*Open Space/Recreation:* This category describes the publicly oriented uses that could occur along the shoreline and on the hillsides: passive open space (such as hiking trails) and active open space (such as soccer fields).

#### ***Assumptions for All Community Reuse Alternatives***

The assumptions presented here are included as part of the description for all three community reuse alternatives.

#### **Utility Infrastructure**

Planned infrastructure improvements listed below are from the Draft Reuse Plan:

- Electrical and lighting systems.
- Water supply systems and fire protection work.
- Gas mains and electrical transmission lines.
- Sewer and storm water systems.
- Streets, median islands, vehicle access, sidewalks, gutters and traffic signing.

#### **Transportation, Traffic, and Circulation**

- The analysis assumes there would be no eastbound off-ramp from Interstate 580 to Western Drive and therefore no direct access to Western Drive from the west.
- Within the project site, the ultimate design of the project would include sidewalks at key locations, primarily along Western Drive, connecting to major activity centers. The relatively flat grades of the western portions of the property would accommodate a bicycle path.
- Future detailed project site plans would accommodate parking demand in off-street parking lots, which would be distributed within the project site.

#### **Community Warning System**

Contra Costa County maintains a Community Warning System to address potential toxic air releases from its industrial facilities. NFD Point Molate is adjacent to heavy industrial uses that include a petroleum refinery and chemical plant. Releases of toxic substances from these facilities could result in exposure to people at NFD Point Molate. Therefore, before issuing a certificate of occupancy for any commercial, industrial, or residential uses at NFD Point Molate, the City would ensure that the Community Warning System had siren coverage over the property. Prospective property owners would be advised of the potential for accidental releases and would be informed of the

Community Warning System and other aspects of protection from accidental releases. New buildings would be required to be as air-tight as possible, which would include the use of superior windows and doors.

#### **2.4.2 Alternative 1: Residential/Commercial**

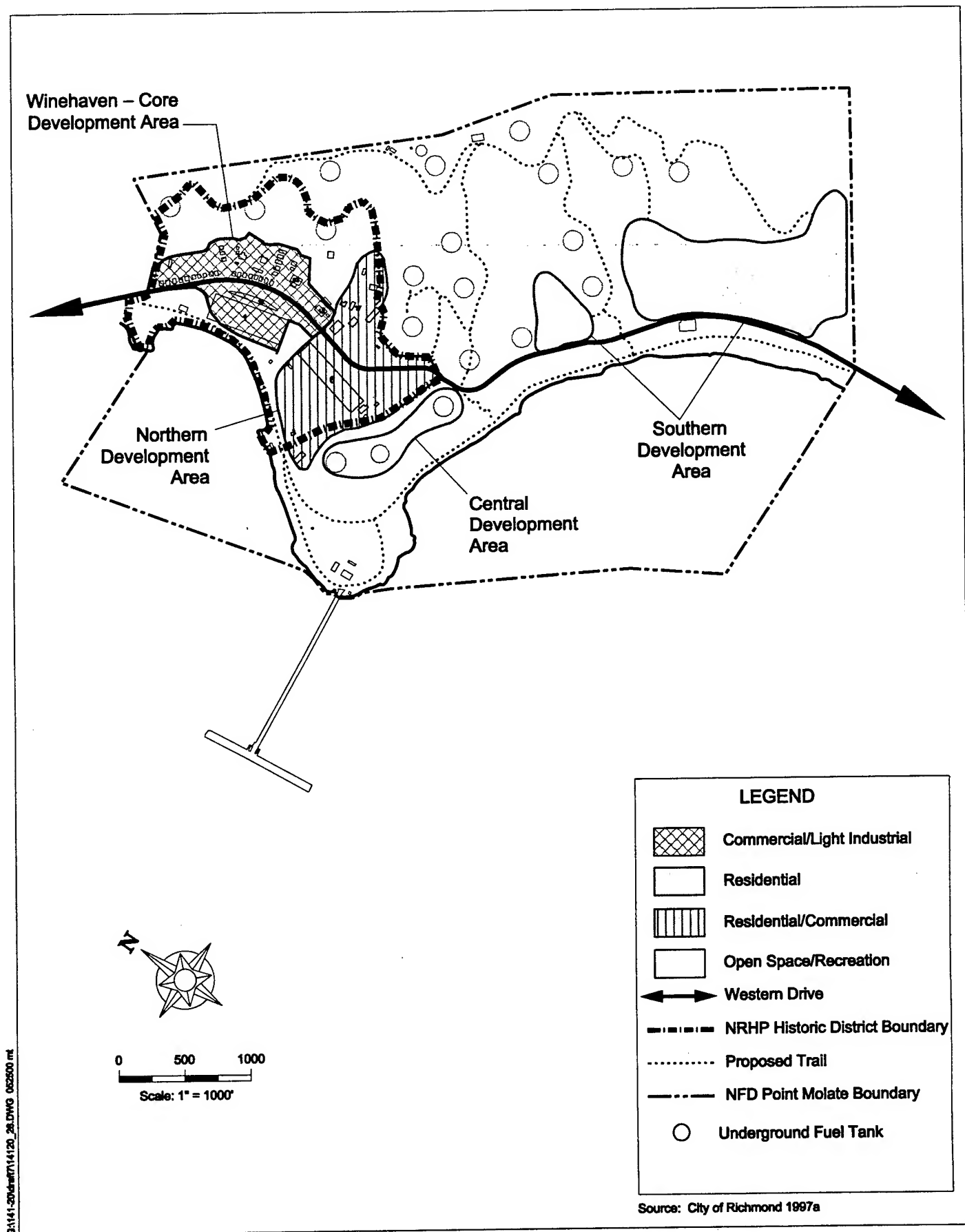
The Residential/Commercial alternative includes about 55 acres (22 ha) of residential, 27 acres (11 ha) of commercial, 6 acres (2.4 ha) of light industrial, and 325 acres (131 ha) of open space/recreation uses (including 100 acres [40 ha] of submerged land) (Table 2.2-1). The distribution of land uses is shown in Figure 2.2-1 and described below by development area. The Southern Development Area is about 35 acres (14 ha); the Central Development area is about 6 acres (2.4 ha); the Northern Development Area is about 20 acres (8 ha); and the Winehaven-Core Development Area is about 17 acres (7 ha). The remaining 325 acres (131 ha) of the NFD Point Molate Property would support an open space/recreation land use, including passive recreation, such as hiking trails on the steep hillsides above Western Drive, and active recreation uses along the shoreline. Shoreline uses could include a public plaza, formal promenade, shoreline park and trail, a waterfront café, watercraft rental, boating center, and seafood, produce, or public markets.

*Southern Development Area.* This area would support a residential land use. Development could include single-family and multifamily residences with 12 and 20 units per acre (about 30 and 49 units per ha), respectively, for a total of 424 residences on 35 acres (about 14 ha).

*Central Development Area.* This area would support a residential land use. Development could include multifamily residences at a density of 20 units per acre (about 49 units per ha), for a total of 120 units.

*Northern Development Area.* This area would support commercial and residential land uses. Commercial uses could include a job-training and conference center with lodging and a small hotel. Residential development could include about 77 live/work units and, on about 12 acres, about 109 units of single-family residences at a density of 9 units per acre (about 22 units per ha).

*Winehaven-Core Development Area.* This area would support commercial and light industrial land uses. Possible commercial development could include a retreat center, bed and breakfast, museum, restaurant, and office space. Light industrial development could include a winery or office space.





### 2.4.3 Alternative 2: Industrial/Commercial

The Industrial/Commercial alternative (preferred alternative) includes about 27 acres (11 ha) of commercial, 61 acres (25 ha) of light industrial, and 325 acres (131 ha) of open space/recreation land uses (including 100 acres [40 ha] of submerged land). Most of the development would be light industrial. There would be no residential uses. The distribution of land uses is shown in Figure 2.2-2 and described below by development area. The remaining 325 acres (131 ha) would support an open space/recreation land use, including passive recreation, such as hiking trails on the steep hillsides above Western Drive, and active recreation uses along the shoreline. Shoreline uses could include a public plaza, formal promenade, shoreline park and trail, a waterfront café, watercraft rental, boating center, and seafood, produce, or public markets.

*Southern Development Area.* This area would support a light industrial land use. Development could include research and development and special light industries.

*Central Development Area.* This area would support a light industrial land use. Development could include research and development and special light industries.

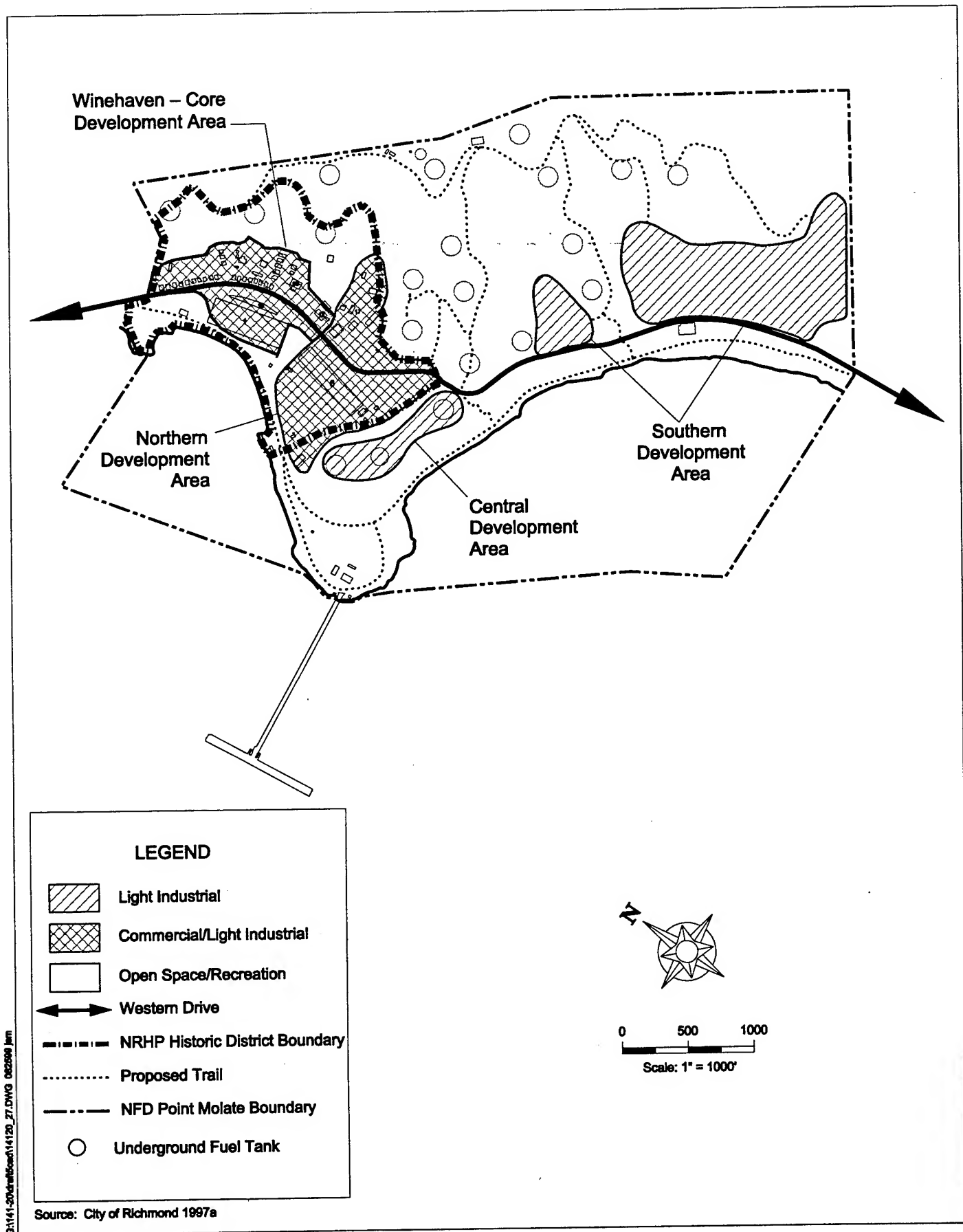
*Northern Development Area.* This area would support commercial and light industrial land uses. Possible commercial developments could include a job-training and conference center with lodging and a small hotel, a satellite campus, and administrative services. Light industrial uses could include winery operations, research and development, laboratories, warehouses, and special industries.

*Winehaven-Core Development Area.* This area would support commercial and light industrial land uses. Possible commercial developments could include a retreat center, bed and breakfast, museum, restaurant, and office space. Light industrial uses could include a winery and office space.

### 2.4.4 Alternative 3: Recreation/Commercial

The Recreation/Commercial alternative includes about 27 acres (11 ha) of commercial, 8 acres (3 ha) of light industrial, and 378 acres (153 ha) of open space/recreation land uses (including 100 acres [40 ha] of submerged land). There would be no residential uses or commercial uses involving overnight stays. The distribution of land uses is shown in Figure 2.2-3 and described below by development area. The open space/recreation land use would include passive recreation, such as hiking trails on the steep hillsides above Western Drive, and active recreation uses along the shoreline. Shoreline uses could include a public plaza, formal promenade, shoreline park and trail, a waterfront café, watercraft rental, boating center, and seafood, produce, or public markets.

*Northern Development Area.* Buildings 6 and 17 would support light industrial uses similar to those in the Winehaven-Core Development Area.



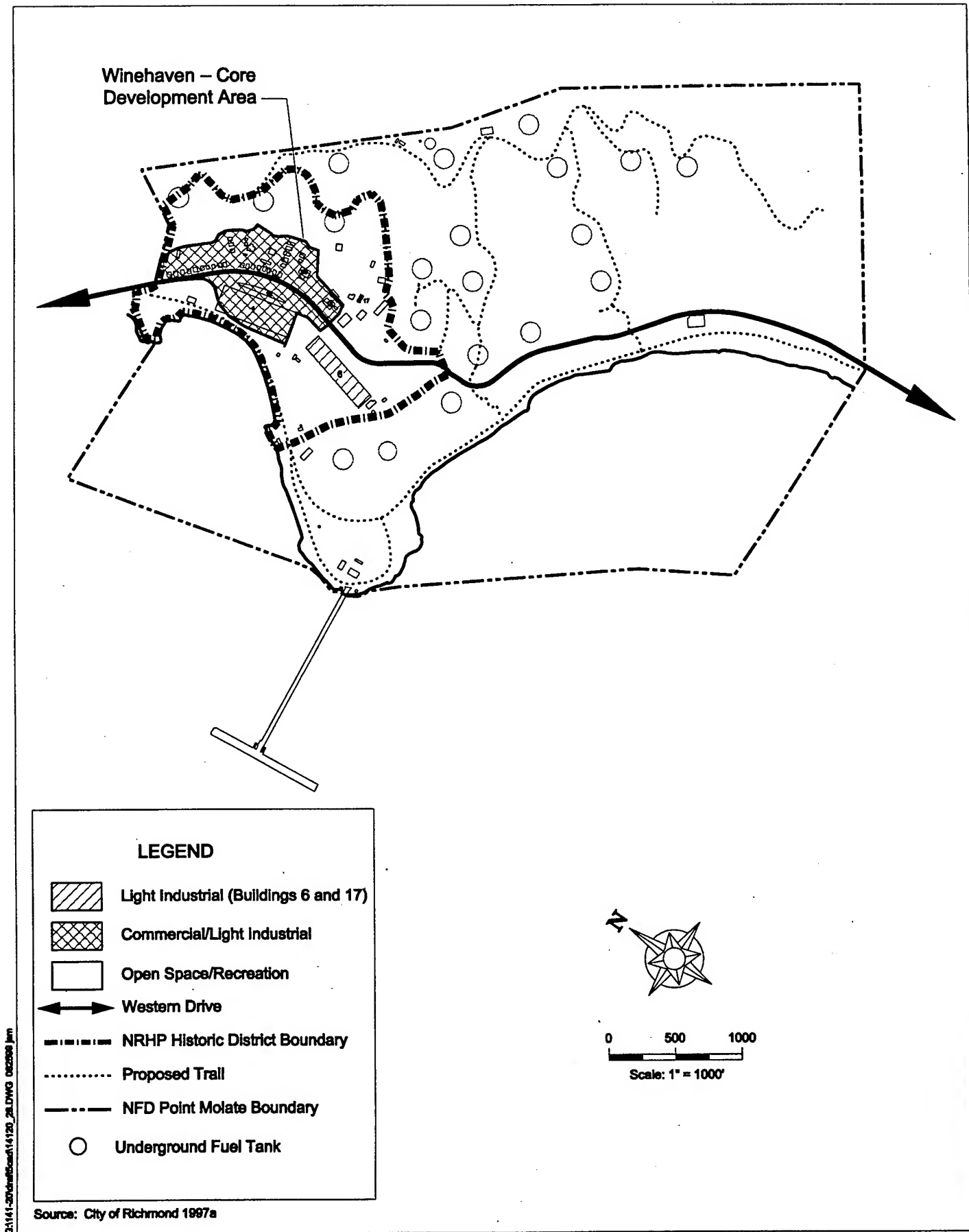


Figure 2.2-3: Conceptual Land Uses for Community Reuse Alternative 3

309 *Winehaven-Core Development Area.* This area would support commercial and light  
310 industrial land uses. Possible commercial developments could include a museum,  
311 restaurant, and office space. Light industrial uses could include a winery and office  
312 space.

#### 313 **2.4.5 No Action Alternative**

314 Under the No Action Alternative, NFD Point Molate would remain a closed Federal  
315 property under caretaker status and would not be reused or redeveloped.

316 Environmental cleanup would continue and be completed. Activities associated with  
317 Navy caretaker status would include the following:

- 318 • Inspecting and maintaining utility systems when necessary to protect public health,  
319 the environment, and public safety.
- 320 • Periodically maintaining the property, as necessary, to protect the structures from  
321 fires or nuisance conditions.
- 322 • Continuing land management programs, such as natural resource management, pest  
323 control, and erosion control.
- 324 • Minimally maintaining roadways.
- 325 • Continuing Installation Restoration Program and Compliance Program activities.

### 326 **2.5 ALTERNATIVES CONSIDERED BUT ELIMINATED**

327 Under NEPA, an alternative can be eliminated from further consideration if it does not  
328 meet the specific criteria used to select an action.

329 Under CEQA, an alternative can be rejected from consideration if it fails to meet most of  
330 the major objectives of the project sponsor, in this case, the City. CEQA also requires  
331 that an alternative be feasible, that is, be capable of being accomplished in a successful  
332 manner, within a reasonable period of time, taking into account economic,  
333 environmental, legal, social, and technological factors.

334 No alternatives, including the continuation of use as a fuel depot, were proposed by  
335 Federal, state, or local agencies, or by members of the public during the scoping hearing  
336 held on October 1, 1997.

337 During the EIS/EIR scoping process, an 18-hole public golf course was considered as a  
338 possible reuse for a portion of the site. That land use was rejected by the City and the  
339 public because it did not meet the City's Draft Reuse Plan community goals, objectives,  
340 and thematic concepts; would have high maintenance costs; and raised environmental  
341 concerns, including the effects of herbicides and pesticides on water quality, the amount

of water required, impacts on topography, and the potential disturbance of native plant and animal communities.

## 2.6 PROJECT APPROVAL REQUIREMENTS

The City Planning Commission, Design Review Board, and Richmond City Council are the local decision-makers expected to use this document in relation to amendments to the City of Richmond General Plan (General Plan), rezonings, subdivisions, conditional use permits, infrastructure improvements, and development proposals.

After property disposal, the City would have primary jurisdiction over reuse of the NFD Point Molate property. Pursuant to CEQA, the City is the lead agency for preparation of the EIR. Additional CEQA review of project-specific reuse could be triggered by the City's discretionary review of General Plan amendments, rezonings, conditional use permit, possible variances, and Development Review and Development Agreement applications.

Various Federal, state, regional and local agencies will review this document and may use it in their planning and decision-making. The following list includes governmental agencies that could be permit-granting agencies, responsible agencies under CEQA, or advisory to one or more of the permitting agencies.

### *Federal Agencies*

U.S. Army Corps of Engineers  
U.S. Environmental Protection Agency  
U.S. Fish and Wildlife Service

### *California Agencies*

State Lands Commission  
Department of Fish and Game  
Regional Water Quality Control Board, San Francisco Bay Region  
Department of Toxic Substances Control  
Office of State Historic Preservation

### *Local/Regional Agencies and Organizations*

Bay Conservation and Development Commission  
Contra Costa County Health Services Department  
East Bay Regional Park District  
Bay Area Air Quality Management District  
Richmond Municipal Sewer District

## 2.7 ENVIRONMENTALLY PREFERABLE (NEPA)/ENVIRONMENTALLY SUPERIOR (CEQA) ALTERNATIVE

NEPA requires that an environmentally preferable alternative be identified; CEQA requires that an environmentally superior alternative be identified. The No Action Alternative is the environmentally preferable alternative and environmentally superior alternative because no impacts would occur. However, consistent with CEQA requirements, one of the reuse alternatives must be further identified as an environmentally superior alternative. Therefore, Alternative 3, Open Space/Recreation, is the CEQA environmentally superior alternative: it has no significant unavoidable impacts, and its impacts would be less than those anticipated by the other two community reuse alternatives, since it has less development.

## 2.8 COMPARISON OF ALTERNATIVES

NEPA and CEQA, respectively, require that an EIS/EIR present the impacts of each alternative in comparative form to define the issues and provide a clear basis for choice among options by decision-makers and the public. For purposes of the Navy NEPA analysis, direct environmental consequences or impacts are those associated with Federal property disposal, and indirect impacts are associated with community reuse of the property. The three community reuse alternatives are shown on Figure 2.8-1. Tables 2.8-1 and 2.8-2 summarize the significant impacts and corresponding mitigation measures for implementation of each reuse alternative under NEPA and CEQA, respectively.

Navy cannot control reuse after the property is conveyed from Federal ownership. Therefore, implementation of mitigation measures for reuse-related environmental impacts would be the responsibility of the acquiring entity and not the responsibility of Navy.

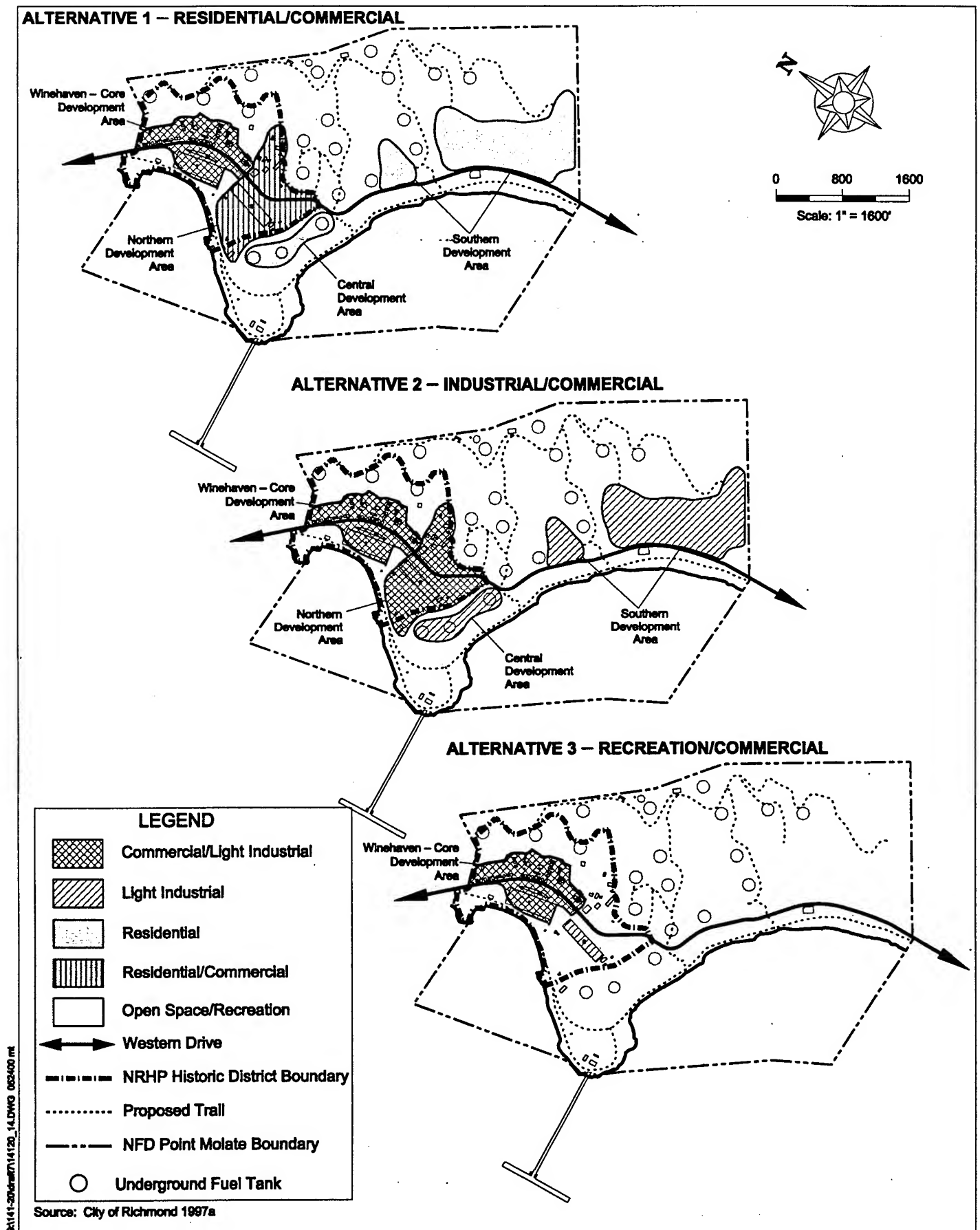


TABLE 2.8-1  
SUMMARY OF SIGNIFICANT ENVIRONMENTAL IMPACTS AND MITIGATIONS UNDER NEPA

Resource Area	NAVY ACTIONS		REUSE ALTERNATIVES		
	Navy Disposal	No Action	Alternative 1: Residential/Commercial	Alternative 2: Industrial/Commercial	Alternative 3: Recreation/Commercial
Land Use	No impacts.	No impacts.	<p><b>Significant Unmitigable Impact</b>  <i>Impact: Incompatibility between On-Site Land Uses and Adjacent Off-Site Land Uses.</i> Introduction of a residential land use component under Alternative 1 would be incompatible with the heavy industrial uses of the adjacent refinery and nearby chemical plant due to the potential exposure of future residents to accidental releases of toxic substances from the refinery. The Southern Development Area and most of the Central and Northern Development Areas, which are proposed for residential development, lie within the Alternate Release Scenario impact circle for ammonia as developed in Chevron's Risk Management Program. Because it would not be physically possible to provide an adequate buffer between sensitive receptors in these areas and the off-site sources of potential accidental release, introduction of residential uses in these areas would result in a significant unmitigable impact.</p> <p><b>Significant and Mitigable Impact</b>  <i>Impact 1: Incompatibility between On-Site Land Uses.</i> Expansion of the existing sewage treatment plant or construction of a new sewage treatment plant, as well as the possibility of a winery operation on site, could result in incompatibility between these land uses and other development on-site.</p> <p>(continued on next page)</p>	<p>This impact is less than significant under Alternative 2.</p> <p><b>Significant and Mitigable Impact</b>  <i>Impact: Incompatibility between On-Site Land Uses.</i> This impact is the same as described for Alternative 1.</p> <p><i>Mitigation:</i> Mitigation is the same as described for Alternative 1, except that Alternative 2 would not have residential use.</p>	<p>This impact is less than significant under Alternative 3.</p> <p><b>Significant and Mitigable Impact</b>  <i>Impact: Incompatibility between On-Site Land Uses.</i> This impact is the same as described for Alternative 1.</p> <p><i>Mitigation:</i> Mitigation is the same as described for Alternative 1, except that Alternative 3 would not have residential use.</p>



TABLE 2.8-1  
SUMMARY OF SIGNIFICANT ENVIRONMENTAL IMPACTS AND MITIGATIONS UNDER NEPA (CONTINUED)

Resource Area	NAVY ACTIONS		REUSE ALTERNATIVES		
	Navy Disposal	No Action	Alternative 1: Residential/Commercial	Alternative 2: Industrial/Commercial	Alternative 3: Recreation/Commercial
Land Use (Cont.)			<p><i>Mitigation 1.</i> Site sewage treatment plant, winery operations, and other development that could adversely affect residential or commercial uses, away from other on-site development so that odors from sewage treatment, a winery, or other operations do not adversely affect these developments.</p> <p><i>Impact 2: Inconsistency with Plans and Policies.</i> The residential land use proposed under Alternative 1 would not be consistent with Richmond General Plan land use policies and zoning ordinances that promote separation of residential land uses from heavy industrial and maritime uses. While the open space/recreation lands at NFD Point Molate combined with adjacent open space lands of the refinery would provide some separation between the refinery operations and proposed residences, it would not be adequate separation to reduce the potential risk of an accidental release of toxic substances to a sensitive receptor (residential areas) as discussed above.</p> <p><i>Mitigation 2.</i> Modify the Richmond General Plan and Zoning Ordinance to allow placement of residential dwellings with heavy industrial and maritime uses at NFD Point Molate. Expand, refine, or eliminate the land use policies and zoning ordinances discussed in Section 3.1.3 that advocate separation of residential land uses from heavy industrial and maritime uses.</p>	<p>This impact is less than significant under Alternative 2.</p>	<p>This impact is less than significant under Alternative 3.</p>
Visual Resources	No impacts.	No impacts.	No significant impacts.	No significant impacts.	No significant impacts.

TABLE 2.8-1  
SUMMARY OF SIGNIFICANT ENVIRONMENTAL IMPACTS AND MITIGATIONS UNDER NEPA (CONTINUED)

Resource Area	NAVY ACTIONS		REUSE ALTERNATIVES		
	Navy Disposal	No Action	Alternative 1: Residential/Commercial	Alternative 2: Industrial/Commercial	Alternative 3: Recreation/Commercial
Socioeconomics	No impacts.	No impacts.	No significant impacts.	No significant impacts.	No significant impacts.
Public Services	No impacts.	No impacts.	No significant impacts.	No significant impacts.	No significant impacts.
Cultural Resources	No significant impacts.	No impacts.	No significant impacts.	No significant impacts.	No significant impacts.
Biological Resources	No impacts.	No impacts.	No significant impacts.	No significant impacts.	No significant impacts.
Water Resources	No impacts.	No impacts.	No significant impacts.	No significant impacts.	No significant impacts.
Geology and Soils	No impacts.	No impacts.	<b>Significant and Mitigable Impact</b> <i>Impact: Severe Seismic Ground Shaking.</i> New construction would meet current seismic standards contained in the Uniform Building Code (UBC), the California Division of Mines and Geology (CDMG) guidelines for evaluating seismic hazards, and the Safety Element of the General Plan. State law only requires seismic retrofitting of older unsafe buildings if they are to be used for municipal buildings. Therefore, older historic structures could be damaged in a large earthquake and pose a risk to people and	<b>Significant and Mitigable Impact</b> <i>Impact: Severe Seismic Ground Shaking.</i> This impact and its mitigation are the same as under Alternative 1.	<b>Significant and Mitigable Impact</b> <i>Impact: Severe Seismic Ground Shaking.</i> This impact and its mitigation are the same as under Alternative 1.

(continued on next page)

TABLE 2.8-1  
SUMMARY OF SIGNIFICANT ENVIRONMENTAL IMPACTS AND MITIGATIONS UNDER NEPA (CONTINUED)

Resource Area	NAVY ACTIONS		REUSE ALTERNATIVES		
	Navy Disposal	No Action	Alternative 1: Residential/Commercial	Alternative 2: Industrial/Commercial	Alternative 3: Recreation/Commercial
Geology and Soils (Cont.)			<p>structures. In addition, infrastructure components (utilities and roadways) could be damaged or destroyed.</p> <p><i>Mitigation:</i> Before reusing existing structures, perform the following:</p> <ul style="list-style-type: none"> <li>Analyze and, if necessary, perform seismic upgrades of structures designated for reuse when rehabilitation occurs to minimize life safety risks from failures in large earthquakes. Do not reuse structures that cannot feasibly be retrofitted to meet a life safety objective.</li> <li>Inspect and retrofit to existing standards those utilities that are essential for maintaining emergency services or that could increase hazards (such as fire). Replace utilities that cannot be retrofitted or supplement them with backup systems.</li> </ul>		
Transportation, Traffic, and Circulation	No impacts.	No impacts.	<p><b>Significant and Mitigable Impacts</b></p> <p><i>Impact 1: Unsafe Circulation.</i> The substandard condition of sections of Western Drive and the lack of access to Western Drive from eastbound I-580 would result in inadequate conditions to safely support the estimated traffic volumes under Alternative 1. While planned reuse of NFD Point Molate would result in improvements to Western Drive on site, the off-site road segment of Western Drive (between I-580 and the south entrance) do not conform to City standards.</p> <p>(continued on next page)</p>	<p><b>Significant and Mitigable Impacts</b></p> <p><i>Impact 1: Unsafe Circulation.</i> This impact and its mitigation are the same as under Alternative 1.</p>	<p><b>Significant and Mitigable Impacts</b></p> <p><i>Impact 1: Unsafe Circulation.</i> This impact and its mitigation are the same as under Alternative 1.</p>

TABLE 2.8-1  
SUMMARY OF SIGNIFICANT ENVIRONMENTAL IMPACTS AND MITIGATIONS UNDER NEPA (CONTINUED)

Resource Area	NAVY ACTIONS		REUSE ALTERNATIVES		
	Navy Disposal	No Action	Alternative 1: Residential/Commercial	Alternative 2: Industrial/Commercial	Alternative 3: Recreation/Commercial
Transportation, Traffic, and Circulation (Cont.)			<p><i>Mitigation 1.</i> Widen Western Drive between I-580 and the entrance to the NFD Point Molate property to conform to applicable City standards. Design Western Drive to be a two-lane roadway, with turn lanes, that accommodates bicyclists and pedestrians. Provide signs, appropriate striping, and roadway markings at I-580 and Western Drive to direct eastbound travelers on I-580 to Western Drive.</p> <p><i>Impact 2: Deterioration in LOS at the Westbound I-580/Richmond Parkway Intersection.</i> At build-out in 2020, Alternative 1 would degrade LOS at the westbound I-580/Richmond Parkway intersection to LOS E in the A.M. peak hour.</p>	<p><i>Impact 2: Deterioration in LOS at the Westbound I-580/Richmond Parkway Intersection.</i> By 2010, the westbound I-580/Richmond Parkway intersection is projected to deteriorate to LOS F during the A.M. peak hour. This is a conservative projection of the impact on this intersection for two reasons: (1) it is a non-standard signalized intersection that is only partially controlled, and (2) trip generation was based on land uses using the maximum floor-area ratio (FAR) permitted by the City of 0.50 (see the Traffic Assumptions in Chapter 2). If the actual FAR of development is closer to 0.30 (which is typical for the City), the LOS would likely remain acceptable.</p> <p><i>Mitigation 2.</i> Mitigation is the same as that identified for Alternative 1. Implementing this mitigation measure would improve LOS during the A.M. and P.M. peak hours to LOS B in 2010, reducing this impact to a</p> <p>(continued on next page)</p>	<p>This impact is less than significant under Alternative 3.</p>

TABLE 2.8-1  
SUMMARY OF SIGNIFICANT ENVIRONMENTAL IMPACTS AND MITIGATIONS UNDER NEPA (CONTINUED)

Resource Area	NAVY ACTIONS		REUSE ALTERNATIVES		
	Navy Disposal	No Action	Alternative 1: Residential/Commercial	Alternative 2: Industrial/Commercial	Alternative 3: Recreation/Commercial
Transportation, Traffic, and Circulation (Cont.)			<p>configuration is one right-turn lane, two through lanes, and one left-turn lane). Approve and assure implementation of the re-striping of this intersection in consultation with the California Department of Transportation (Caltrans). This mitigation measure would improve the LOS to B.</p> <p><i>Impact 3: Traffic Volumes on Richmond Parkway Ramps.</i> Freeway ramps with volumes of less than 1,500 vehicles per hour are considered by Caltrans to operate acceptably; ramps with volumes greater than 1,500 vehicles per hour require further analysis. The threshold would be exceeded on the Richmond Parkway westbound on-ramp in the A.M. peak hour.</p> <p><i>Mitigation 3.</i> Monitor the Richmond Parkway westbound on-ramp by conducting a traffic study for each phase of the project. Evaluate the impact of the development projections of traffic for the freeway ramp. If the threshold of 1,500 vehicles per hour is exceeded, conduct an operational analysis satisfying Caltrans requirements. If the operational analysis indicates an unacceptable operating condition, develop modifications to the ramp with the goal of reducing the vehicles per hour to less than 1,500.</p> <p>This is not an impact under Alternative 1.</p>	<p>less than significant level. In 2020, this mitigation measure would result in LOS C.</p> <p><i>Impact 3: Traffic Volumes on Richmond Parkway Ramps.</i> The Caltrans threshold of 1,500 vehicles per hour would be exceeded on the Richmond Parkway westbound on-ramp by 2010 during the A.M. peak hour and the Richmond Parkway eastbound off-ramp in 2020 during the P.M. peak hour.</p> <p><i>Mitigation 3.</i> Mitigation is the same as that identified for Alternative 1.</p>	<p><i>Impact 2: Traffic Volumes on Richmond Parkway Ramp.</i> The Caltrans threshold of 1,500 vehicles per hour would be exceeded on the Richmond Parkway westbound on-ramp during the A.M. peak hour.</p> <p><i>Mitigation 2.</i> Mitigation is the same as that identified for Alternative 1, Mitigation 3.</p> <p>This is not an impact under Alternative 3.</p>

(continued on next page)

TABLE 2.8-1  
SUMMARY OF SIGNIFICANT ENVIRONMENTAL IMPACTS AND MITIGATIONS UNDER NEPA (CONTINUED)

Resource Area	NAVY ACTIONS		REUSE ALTERNATIVES		
	Navy Disposal	No Action	Alternative 1: Residential/Commercial	Alternative 2: Industrial/Commercial	Alternative 3: Recreation/Commercial
Transportation, Traffic, and Circulation (Cont.)			<p>This is not an impact under Alternative 1.</p>	<p><i>Mitigation 4:</i> Remove the channelization island separating traffic turning right from westbound Tewksbury Avenue onto northbound Richmond Parkway. Replace the free northbound through lane with a signal-controlled northbound lane. Modify the signal to control the northbound right-turn lane. Re-stripe the intersection to one right-turn lane and two left-turn lanes (currently the configuration is one right-turn lane and one left-turn lane). With mitigation, the intersection would operate at LOS A during the P.M. peak hour.</p> <p><i>Impact 5: Deterioration in LOS at the Eastbound I-580/Marine Street Intersection.</i> At full build-out in 2020, Alternative 2 is expected to adversely affect the I-580 eastbound ramp/Marine Street intersection, reducing the LOS from B to E in the P.M. peak hour. The significance of this impact depends on the timing of build-out of the project, as well as the ultimate density of development. This intersection would operate at an acceptable LOS D with the project in 2010; however, by 2020, the additional increment of regional growth would lead to a significant adverse impact. Because of the characteristics of the terrain and the geometry of the off-ramp, physical (widening) mitigation for this impact would not be feasible.</p> <p>(continued on next page)</p>	<p>This is not an impact under Alternative 3.</p> <p>This is not an impact under Alternative 1.</p>

TABLE 2.8-1  
SUMMARY OF SIGNIFICANT ENVIRONMENTAL IMPACTS AND MITIGATIONS UNDER NEPA (CONTINUED)

Resource Area	NAVY ACTIONS		REUSE ALTERNATIVES		
	Navy Disposal	No Action	Alternative 1: Residential/Commercial	Alternative 2: Industrial/Commercial	Alternative 3: Recreation/Commercial
Transportation, Traffic, and Circulation (Cont.)				<p>The analysis performed for this EIS/EIR is based on a Floor-Area-Ratio (FAR) of 0.50, which is the maximum permitted by the City. Typically, developments of the type envisaged build out with a FAR in the range of 0.30 to 0.35. If, as the community reuse plan is developed, a lower-than-maximum FAR is produced, it is unlikely that the significant negative impact projected by this analysis would occur.</p> <p><i>Mitigation 5.</i> Prior to approval of a project phase, require the project proponent to evaluate the impact of the additional development on this intersection. If a significant adverse impact is identified, require a reduced FAR so that the intersection operates at LOS D or better.</p>	
Air Quality	No impacts.	No impacts.	<p><b>Significant and Mitigable Impacts</b> <i>Impact 1: Objectionable Odors Associated with On-Site Activity.</i> Objectionable odors could result from commercial operations, light industrial operations, and wastewater treatment on the property. These odors could affect residents, occupants of commercial and industrial facilities, and visitors to the property. (continued on next page)</p>	<p><b>Significant and Mitigable Impacts</b> <i>Impact 1: Objectionable Odors Associated with On-Site Activity.</i> This impact and its mitigation are similar to that identified under Alternative 1, except that there would be less exposure because Alternative 2 does not propose residential uses. More odors could result from the light industrial operations.</p>	<p><b>Significant and Mitigable Impacts</b> This is not an impact under Alternative 3.</p>

TABLE 2.8-1  
SUMMARY OF SIGNIFICANT ENVIRONMENTAL IMPACTS AND MITIGATIONS UNDER NEPA (CONTINUED)

Resource Area	NAVY ACTIONS		REUSE ALTERNATIVES		
	Navy Disposal	No Action	Alternative 1: Residential/Commercial	Alternative 2: Industrial/Commercial	Alternative 3: Recreation/Commercial
Air Quality (Cont.)			<p><i>Mitigation 1.</i> Prior to issuance of any permit, evaluate objectionable odors from light industrial uses on a project-specific basis and implement appropriate odor controls and/or buffers. For uses involving potential objectionable odor sources, such as a winery, incorporate adequate odor controls into the project design or provide adequate buffer zones between residential and industrial developments. Objectionable odors from wastewater are a function of the treatment options. If on-site treatment is selected, design and site the plant to ensure that residents are not subject to objectionable odors from the plant or select off-site wastewater treatment.</p> <p><i>Impact 2: Consistency with BAAQMD CAP.</i> Alternative 1 would be inconsistent with the BAAQMD Clean Air Plan (CAP) because CAP trip control measures were not considered in the Reuse Plan.</p> <p><i>Mitigation 2.</i> Prior to approval of any discretionary project, integrate CAP trip control measures into specific project development proposals.</p>	<p><i>Impact 2: Consistency with BAAQMD CAP.</i> This impact and its mitigation are the same as under Alternative 1.</p>	<p><i>Impact: Consistency with BAAQMD CAP.</i> This impact and its mitigation are the same as under Alternative 1.</p>
Noise	No impacts.	No impacts.	No significant impacts.	No significant impacts.	No significant impacts.



**TABLE 2.8-1**  
**SUMMARY OF SIGNIFICANT ENVIRONMENTAL IMPACTS AND MITIGATIONS UNDER NEPA (CONTINUED)**

Resource Area	NAVY ACTIONS		REUSE ALTERNATIVES		
	Navy Disposal	No Action	Alternative 1: Residential/Commercial	Alternative 2: Industrial/Commercial	Alternative 3: Recreation/Commercial
Utilities	No impacts.	No impacts.	<p><b>Significant and Mitigable Impact</b>  <i>Impact 1: Sanitary Sewer System.</i> The NFD Point Molate sewage treatment plant does not have the capacity to handle the maximum wastewater load of 360,000 gpd (1,400,000 lpd) estimated for this alternative (Harding Lawson Associates 1999).</p> <p><i>Mitigation 1:</i> The City's Master Utility Plan considers three options to meet the sanitary sewer system needs of Alternative 1: (1) expand the existing sewage treatment plant or construct a new treatment plant and collection system on site; (2) treat some wastewater on site and haul the excess to the Richmond Municipal Sewer District plant for treatment, and (3) construct a new pipeline and pumping system that would transfer all the wastewater to the Richmond Municipal Sewer District plant.</p>	<p><b>Significant and Mitigable Impact</b>  <i>Impact 1: Sanitary Sewer System.</i> This impact and its mitigation are the same as under Alternative 1, although the increased wastewater load would be greater than under Alternative 1.</p>	<p><b>Significant and Mitigable Impact</b>  <i>Impact 1: Sanitary Sewer System.</i> This impact and its mitigation are the same as under Alternative 1, although this alternative would have the least wastewater load among the three community reuse alternatives.</p>
Hazardous Materials and Waste	No impacts.	No impacts.	No significant impacts.	No significant impacts.	No significant impacts.

TABLE 2.8-2  
SUMMARY OF SIGNIFICANT ENVIRONMENTAL IMPACTS AND MITIGATIONS UNDER CEQA

Resource Area	NAVY ACTIONS		REUSE ALTERNATIVES		
	Navy Disposal	No Action	Alternative 1: Residential/Commercial	Alternative 2: Industrial/Commercial	Alternative 3: Recreation/Commercial
Land Use	No impacts.	No impacts.	<p><b>Significant Unmitigable Impact</b>  <i>Impact: Incompatibility between On-Site Land Uses and Adjacent Off-Site Land Uses.</i> Introduction of a residential land use component under Alternative 1 would be incompatible with the heavy industrial uses of the adjacent refinery and nearby chemical plant due to the potential exposure of future residents to accidental releases of toxic substances from the refinery. The Southern Development Area and most of the Central and Northern Development Areas, which are proposed for residential development, lie within the Alternate Release Scenario impact circle for ammonia as developed in Chevron's Risk Management Program. Because it would not be physically possible to provide an adequate buffer between sensitive receptors in these areas and the off-site sources of potential accidental release, introduction of residential uses in these areas would result in a significant unmitigable impact.</p> <p><b>Significant and Mitigable Impact</b>  <i>Impact 1: Incompatibility between On-Site Land Uses.</i> Expansion of the existing sewage treatment plant or construction of a new sewage treatment plant, as well as the possibility of a winery operation on site, could result in incompatibility between these land uses and other development on-site.            (continued on next page)</p>	<p>This impact is less than significant under Alternative 2.</p> <p><b>Significant and Mitigable Impact</b>  <i>Impact: Incompatibility between On-Site Land Uses.</i> This impact is the same as described for Alternative 1.  <i>Mitigation:</i> Mitigation is the same as described for Alternative 1, except that Alternative 2 would not have residential use.</p>	<p>This impact is less than significant under Alternative 3.</p> <p><b>Significant and Mitigable Impact</b>  <i>Impact: Incompatibility between On-Site Land Uses.</i> This impact is the same as described for Alternative 1.  <i>Mitigation:</i> Mitigation is the same as described for Alternative 1, except that Alternative 3 would not have residential use.</p>

**TABLE 2.8-2**  
**SUMMARY OF SIGNIFICANT ENVIRONMENTAL IMPACTS AND MITIGATIONS UNDER CEQA (CONTINUED)**

Resource Area	NAVY ACTIONS		REUSE ALTERNATIVES		
	Navy Disposal	No Action	Alternative 1: Residential/Commercial	Alternative 2: Industrial/Commercial	Alternative 3: Recreation/Commercial
Land Use (Cont.)			<p><i>Mitigation 1.</i> Site sewage treatment plant, winery operations, and other development that could adversely affect residential or commercial uses, away from other on-site development so that odors from sewage treatment, a winery, or other operations do not adversely affect these developments.</p> <p><i>Impact 2: Inconsistency with Plans and Policies.</i> The residential land use proposed under Alternative 1 would not be consistent with Richmond General Plan land use policies and zoning ordinances that promote separation of residential land uses from heavy industrial and maritime uses. While the open space/recreation lands at NFD Point Molate combined with adjacent open space lands of the refinery would provide some separation between the refinery operations and proposed residences, it would not be adequate separation to reduce the potential risk of an accidental release of toxic substances to a sensitive receptor (residential areas) as discussed above.</p> <p><i>Mitigation 2.</i> Modify the Richmond General Plan and Zoning Ordinance to allow placement of residential dwellings with heavy industrial and maritime uses at NFD Point Molate. Expand, refine, or eliminate the land use policies and zoning ordinances discussed in Section 3.1.3 that advocate separation of residential land uses from heavy industrial and maritime uses.</p>	<p>This impact is less than significant under Alternative 2.</p>	<p>This impact is less than significant under Alternative 3.</p>
Visual Resources	No impacts.	No impacts.	No significant impacts.	No significant impacts.	No significant impacts.

TABLE 2.8-2  
SUMMARY OF SIGNIFICANT ENVIRONMENTAL IMPACTS AND MITIGATIONS UNDER CEQA (CONTINUED)

Resource Area	NAVY ACTIONS		REUSE ALTERNATIVES		
	Navy Disposal	No Action	Alternative 1: Residential/Commercial	Alternative 2: Industrial/Commercial	Alternative 3: Recreation/Commercial
Socioeconomics	No impacts.	No impacts.	No significant impacts.	No significant impacts.	No significant impacts.
Public Services	No impacts.	No impacts.	<p><b>Significant and Mitigable Impact</b></p> <p><i>Impact: Police and Fire Protection Services.</i> Under CEQA, the current staffing levels of the Richmond Police Department (RPD) and the Richmond Fire Department (RFD) are insufficient to support this alternative. RPD staffing levels are based on population, which would increase to about 2,000 residents under this alternative. RFD's response time goal for the NPD Point Molate property is six minutes. However, since the first crew is responsible for turning on the water, the effective response time before fire-fighting begins is usually between eight and ten minutes (City of Richmond 1998f).</p> <p><i>Mitigation.</i> Increase staff by the equivalent of 4.2 new full-time police officers (City of Richmond 1998g). Establish a fire station with a full crew (three firefighters) and fire truck at the existing fire station (Building 630). This will ensure a six-minute or shorter response time to fires and meet the service standard. In addition, install enough fire hydrants connected to the EBMUD water line along Western Drive to ensure 1,500 gpm (5,700 lpm) of water pressure on the site.</p>	<p><b>Significant and Mitigable Impact</b></p> <p><i>Impact: Police and Fire Protection Services.</i> This impact and its mitigation are the same as under Alternative 1.</p>	<p><b>Significant and Mitigable Impact</b></p> <p><i>Impact: Police and Fire Protection Services.</i> This impact and its mitigation are the same as under Alternative 1.</p>
Cultural Resources	No significant impacts.	No impacts.	No significant impacts.	No significant impacts.	No significant impacts.

**TABLE 2.8-2**  
**SUMMARY OF SIGNIFICANT ENVIRONMENTAL IMPACTS AND MITIGATIONS UNDER CEQA (CONTINUED)**

Resource Area	NAVY ACTIONS		REUSE ALTERNATIVES		
	Navy Disposal	No Action	Alternative 1: Residential/Commercial	Alternative 2: Industrial/Commercial	Alternative 3: Recreation/Commercial
Biological Resources	No impacts.	No impacts.	No significant impacts.	No significant impacts.	No significant impacts.
Water Resources	No impacts.	No impacts.	No significant impacts.	No significant impacts.	No significant impacts.
Geology and Soils	No impacts.	No impacts.	<b>Significant and Mitigable Impact</b> <i>Impact: Severe Seismic Ground Shaking.</i> New construction would meet current seismic standards contained in the Uniform Building Code (UBC), the California Division of Mines and Geology (CDMG) guidelines for evaluating seismic hazards, and the Safety Element of the General Plan. State law only requires seismic retrofitting of older unsafe buildings if they are to be used for municipal buildings. Therefore, older historic structures could be damaged in a large earthquake and pose a risk to people and structures. In addition, infrastructure components (utilities and roadways) could be damaged or destroyed. <i>Mitigation:</i> Before reusing existing structures, perform the following: (continued on next page)	<b>Significant and Mitigable Impact</b> <i>Impact: Severe Seismic Ground Shaking.</i> This impact and its mitigation are the same as under Alternative 1.	<b>Significant and Mitigable Impact</b> <i>Impact: Severe Seismic Ground Shaking.</i> This impact and its mitigation are the same as under Alternative 1.

TABLE 2.8-2  
SUMMARY OF SIGNIFICANT ENVIRONMENTAL IMPACTS AND MITIGATIONS UNDER CEQA (CONTINUED)

Resource Area	NAVY ACTIONS		REUSE ALTERNATIVES		
	Navy Disposal	No Action	Alternative 1: Residential/Commercial	Alternative 2: Industrial/Commercial	Alternative 3: Recreation/Commercial
Geology and Soils (Cont.)			<ul style="list-style-type: none"> <li>Analyze and, if necessary, perform seismic upgrades of structures designated for reuse when rehabilitation occurs to minimize life safety risks from failures in large earthquakes. Do not reuse structures that cannot feasibly be retrofitted to meet a life safety objective.</li> <li>Inspect and retrofit to existing standards those utilities that are essential for maintaining emergency services or that could increase hazards (such as fire). Replace utilities that cannot be retrofitted or supplement them with backup systems.</li> </ul>		
Transportation, Traffic, and Circulation	No impacts.	No impacts.	<p><b>Significant and Mitigable Impacts</b>  <i>Impact 1: Unsafe Circulation.</i> The substandard condition of sections of Western Drive and the lack of access to Western Drive from eastbound I-580 would result in inadequate conditions to safely support the estimated traffic volumes under Alternative 1. While planned reuse of NFD Point Molate would result in improvements to Western Drive on site, the off-site road segment of Western Drive (between I-580 and the south entrance) do not conform to City standards.</p> <p><i>Mitigation 1.</i> Widen Western Drive between I-580 and the entrance to the NFD Point Molate property to conform to applicable City standards. Design Western Drive to be a two-lane roadway, with turn lanes, that accommodates bicyclists and pedestrians. Provide signs, appropriate striping, and roadway markings at I-580 and Western Drive to direct eastbound travelers on I-580 to Western Drive.            (continued on next page)</p>	<p><b>Significant and Mitigable Impacts</b>  <i>Impact 1: Unsafe Circulation.</i> This impact and its mitigation are the same as under Alternative 1.</p>	<p><b>Significant and Mitigable Impacts</b>  <i>Impact 1: Unsafe Circulation.</i> This impact and its mitigation are the same as under Alternative 1.</p>

TABLE 2.8-2  
SUMMARY OF SIGNIFICANT ENVIRONMENTAL IMPACTS AND MITIGATIONS UNDER CEQA (CONTINUED)

Resource Area	NAVY ACTIONS		REUSE ALTERNATIVES		
	Navy Disposal	No Action	Alternative 1: Residential/Commercial	Alternative 2: Industrial/Commercial	Alternative 3: Recreation/Commercial
Transportation, Traffic, and Circulation (Cont.)			<p><i>Impact 2: Deterioration in LOS at the Westbound I-580/Richmond Parkway Intersection.</i> At build-out in 2020, Alternative 1 would degrade LOS at the westbound I-580/Richmond Parkway intersection to LOS E in the A.M. peak hour.</p> <p><i>Mitigation 2.</i> Re-stripe the southbound approach at the intersection of the I-580 westbound ramp and Richmond Parkway to one right-turn lane, one through lane, one shared through left-turn lane, and one left-turn lane (currently the configuration is one right-turn lane, two through lanes, and one left-turn lane). Approve and assure implementation of the re-striping of this intersection in consultation with the California Department of Transportation (Caltrans). This mitigation measure would improve the LOS to B. (continued on next page)</p>	<p><i>Impact 2: Deterioration in LOS at the Westbound I-580/Richmond Parkway Intersection.</i> By 2010, the westbound I-580/Richmond Parkway intersection is projected to deteriorate to LOS F during the A.M. peak hour. This is a conservative projection of the impact on this intersection for two reasons: (1) it is a non-standard signalized intersection that is only partially controlled, and (2) trip generation was based on land uses using the maximum floor-area ratio (FAR) permitted by the City of 0.50 (see the Traffic Assumptions in Chapter 2). If the actual FAR of development is closer to 0.30 (which is typical for the City), the LOS would likely remain acceptable.</p> <p><i>Mitigation 2.</i> Mitigation is the same as that identified for Alternative 1. Implementing this mitigation measure would improve LOS during the A.M. and P.M. peak hours to LOS B in 2010, reducing this impact to a less than significant level. In 2020, this mitigation measure would result in LOS C.</p>	This impact is less than significant under Alternative 3.

TABLE 2.8-2  
SUMMARY OF SIGNIFICANT ENVIRONMENTAL IMPACTS AND MITIGATIONS UNDER CEQA (CONTINUED)

Resource Area	NAVY ACTIONS		REUSE ALTERNATIVES		
	Navy Disposal	No Action	Alternative 1: Residential/Commercial	Alternative 2: Industrial/Commercial	Alternative 3: Recreation/Commercial
Transportation, Traffic, and Circulation (Cont.)			<p><i>Impact 3: Traffic Volumes on Richmond Parkway Ramps.</i> Freeway ramps with volumes of less than 1,500 vehicles per hour are considered by Caltrans to operate acceptably; ramps with volumes greater than 1,500 vehicles per hour require further analysis. The threshold would be exceeded on the Richmond Parkway westbound on-ramp in the A.M. peak hour.</p> <p><i>Mitigation 3.</i> Monitor the Richmond Parkway westbound on-ramp by conducting a traffic study for each phase of the project. Evaluate the impact of the development projections of traffic for the freeway ramp. If the threshold of 1,500 vehicles per hour is exceeded, conduct an operational analysis satisfying Caltrans requirements. If the operational analysis indicates an unacceptable operating condition, develop modifications to the ramp with the goal of reducing the vehicles per hour to less than 1,500.</p> <p>This is not an impact under Alternative 1.</p>	<p><i>Impact 3: Traffic Volumes on Richmond Parkway Ramps.</i> The Caltrans threshold of 1,500 vehicles per hour would be exceeded on the Richmond Parkway westbound on-ramp by 2010 during the A.M. peak hour and the Richmond Parkway eastbound off-ramp in 2020 during the P.M. peak hour.</p> <p><i>Mitigation 3.</i> Mitigation is the same as that identified for Alternative 1.</p>	<p><i>Impact 2: Traffic Volumes on Richmond Parkway Ramp.</i> The Caltrans threshold of 1,500 vehicles per hour would be exceeded on the Richmond Parkway westbound on-ramp during the A.M. peak hour.</p> <p><i>Mitigation 2.</i> Mitigation is the same as that identified for Alternative 1, Mitigation 3.</p>
			<p><i>Impact 4: Deterioration in LOS on the Eastbound 1-580/Richmond Parkway Intersection.</i> LOS at the eastbound 1-580/Richmond Parkway intersection would deteriorate to LOS E in the P.M. peak hour.</p> <p>(continued on next page)</p>		<p>This is not an impact under Alternative 3.</p>



TABLE 2.8-2  
SUMMARY OF SIGNIFICANT ENVIRONMENTAL IMPACTS AND MITIGATIONS UNDER CEQA (CONTINUED)

Resource Area	NAVY ACTIONS		REUSE ALTERNATIVES		
	Navy Disposal	No Action	Alternative 1: Residential/Commercial	Alternative 2: Industrial/Commercial	Alternative 3: Recreation/Commercial
Transportation, Traffic, and Circulation (Cont.)				<p><i>Mitigation 4.</i> Remove the channelization island separating traffic turning right from westbound Tewksbury Avenue onto northbound Richmond Parkway. Replace the free northbound through lane with a signal-controlled northbound lane. Modify the signal to control the northbound right-turn lane. Re-stripe the intersection to one right-turn lane and two left-turn lanes (currently the configuration is one right-turn lane and one left-turn lane). With mitigation, the intersection would operate at LOS A during the P.M. peak hour.</p> <p><i>Impact 5: Deterioration in LOS at the Eastbound I-580/Marine Street Intersection.</i> At full build-out in 2020, Alternative 2 is expected to adversely affect the I-580 eastbound ramp/Marine Street intersection, reducing the LOS from B to E in the P.M. peak hour. The significance of this impact depends on the timing of build-out of the project, as well as the ultimate density of development. This intersection would operate at an acceptable LOS D with the project in 2010; however, by 2020, the additional increment of regional growth would lead to a significant adverse impact. Because of the characteristics of the terrain and the geometry of the off-ramp, physical (widening) mitigation for this impact would not be feasible.</p> <p>(continued on next page)</p>	<p>This is not an impact under Alternative 3.</p> <p>This is not an impact under Alternative 1.</p>

TABLE 2.8-2  
SUMMARY OF SIGNIFICANT ENVIRONMENTAL IMPACTS AND MITIGATIONS UNDER CEQA (CONTINUED)

Resource Area	NAVY ACTIONS		REUSE ALTERNATIVES		
	Navy Disposal	No Action	Alternative 1: Residential/Commercial	Alternative 2: Industrial/Commercial	Alternative 3: Recreation/Commercial
Transportation, Traffic, and Circulation (Cont.)				<p>The analysis performed for this EIS/EIR is based on a Floor-Area-Ratio (FAR) of 0.50, which is the maximum permitted by the City. Typically, developments of the type envisaged build out with a FAR in the range of 0.30 to 0.35. If, as the community reuse plan is developed, a lower-than-maximum FAR is produced, it is unlikely that the significant negative impact projected by this analysis would occur.</p> <p><i>Mitigation 5.</i> Prior to approval of a project phase, require the project proponent to evaluate the impact of the additional development on this intersection. If a significant adverse impact is identified, require a reduced FAR so that the intersection operates at LOS D or better.</p>	
Air Quality	No impacts.	No impacts.	<p><b>Significant and Mitigable Impacts</b>  <i>Impact 1: Objectionable Odors Associated with On-Site Activity.</i> Objectionable odors could result from commercial operations, light industrial operations, and wastewater treatment on the property. These odors could affect residents, occupants of commercial and industrial facilities, and visitors to the property.            (continued on next page)</p>	<p><b>Significant and Mitigable Impacts</b>  <i>Impact 1: Objectionable Odors Associated with On-Site Activity.</i> This impact and its mitigation are similar to that identified under Alternative 1, except that there would be less exposure because Alternative 2 does not propose residential uses. More odors could result from the light industrial operations.</p>	<p><b>Significant and Mitigable Impacts</b>            This is not an impact under Alternative 3.</p>

TABLE 2.8-2  
SUMMARY OF SIGNIFICANT ENVIRONMENTAL IMPACTS AND MITIGATIONS UNDER CEQA (CONTINUED)

Resource Area	NAVY ACTIONS		REUSE ALTERNATIVES		
	Navy Disposal	No Action	Alternative 1: Residential/Commercial	Alternative 2: Industrial/Commercial	Alternative 3: Recreation/Commercial
Air Quality (Cont.)			<p><b>Mitigation 1.</b> Prior to issuance of any permit, evaluate objectionable odors from light industrial uses on a project-specific basis and implement appropriate odor controls and/or buffers. For uses involving potential objectionable odor sources, such as a winery, incorporate adequate odor controls into the project design or provide adequate buffer zones between residential and industrial developments. Objectionable odors from wastewater are a function of the treatment options. If on-site treatment is selected, design and site the plant to ensure that residents are not subject to objectionable odors from the plant or select off-site wastewater treatment.</p> <p><b>Impact 2:</b> <i>Consistency with BAAQMD CAP.</i> Alternative 1 would be inconsistent with the BAAQMD Clean Air Plan (CAP) because CAP trip control measures were not considered in the Reuse Plan.</p> <p><b>Mitigation 2.</b> Prior to approval of any discretionary project, integrate CAP trip control measures into specific project development proposals.</p>	<p><b>Impact 2:</b> <i>Consistency with BAAQMD CAP.</i> This impact and its mitigation are the same as under Alternative 1.</p>	<p><b>Impact:</b> <i>Consistency with BAAQMD CAP.</i> This impact and its mitigation are the same as under Alternative 1.</p>

TABLE 2.8-2  
SUMMARY OF SIGNIFICANT ENVIRONMENTAL IMPACTS AND MITIGATIONS UNDER CEQA (CONTINUED)

Resource Area	NAVY ACTIONS		REUSE ALTERNATIVES		
	Navy Disposal	No Action	Alternative 1: Residential/Commercial	Alternative 2: Industrial/Commercial	Alternative 3: Recreation/Commercial
Noise	No impacts.	No impacts.	<p><b>Significant and Mitigable Impacts</b></p> <p><i>Impact 1: Traffic Noise on Western Drive.</i> Daily average and peak-hour traffic noise associated with this alternative would exceed 60 on the A-weighted decibel scale (dBA) at distances within 100 feet (30 m) of the centerline of Western Drive.</p> <p><i>Mitigation 1.</i> Either provide new residential development with 100-foot (30-m) setbacks from the centerline of Western Drive, or incorporate structural sound attenuation features (e.g., sound walls or berms) to reduce traffic noise levels at residential parcels near Western Drive to less than 60 dBA during the peak traffic hour. In addition, consider incorporating traffic speed control measures to further reduce traffic noise levels.</p> <p><i>Impact 2: Construction and Demolition Noise.</i> Project construction and demolition activities have the potential for causing temporary disturbance to proposed adjacent residential land uses if those residential uses are developed and occupied before completion of other elements of Alternative 1.</p> <p><i>Mitigation 2.</i> Limit construction and demolition activities to daytime hours between 7 A.M. and 6 P.M. weekdays that are not holidays. Ensure that construction equipment and vehicles use mufflers to minimize noise and are tuned to meet Department of Motor Vehicle Standards.</p>	No significant impacts.	No significant impacts.

TABLE 2.8-2  
SUMMARY OF SIGNIFICANT ENVIRONMENTAL IMPACTS AND MITIGATIONS UNDER CEQA (CONTINUED)

Resource Area	NAVY ACTIONS		REUSE ALTERNATIVES		
	Navy Disposal	No Action	Alternative 1: Residential/Commercial	Alternative 2: Industrial/Commercial	Alternative 3: Recreation/Commercial
Utilities	No impacts.	No impacts.	<p><b>Significant and Mitigable Impacts</b>  <i>Impact 1: Sanitary Sewer System.</i> The NFD Point Molate sewage treatment plant does not have the capacity to handle the maximum wastewater load of 360,000 gpd (1,400,000 lpd) estimated for this alternative (Harding Lawson Associates 1999).</p> <p><i>Mitigation 1:</i> The City's Master Utility Plan considers three options to meet the sanitary sewer system needs of Alternative 1: (1) expand the existing sewage treatment plant or construct a new treatment plant and collection system on site; (2) treat some wastewater on site and haul the excess to the Richmond Municipal Sewer District plant for treatment, and (3) construct a new pipeline and pumping system that would transfer all the wastewater to the Richmond Municipal Sewer District plant.</p> <p><i>Impact 2: Water Distribution System.</i> The existing water distribution system does not have the capacity to serve the estimated need identified for this alternative.</p>	<p><b>Significant and Mitigable Impacts</b>  <i>Impact 1: Sanitary Sewer System.</i> This impact and its mitigation are the same as under Alternative 1, although the increased wastewater load would be greater than under Alternative 1.</p> <p><i>Impact 2: Water Distribution System.</i> This impact and its mitigation are the same as under Alternative 1, although potable water usage would be greater than under Alternative 1.</p>	<p><b>Significant and Mitigable Impacts</b>  <i>Impact 1: Sanitary Sewer System.</i> This impact and its mitigation are the same as under Alternative 1, although this alternative would have the least wastewater load among the three community reuse alternatives.</p> <p><i>Impact 2: Water Distribution System.</i> This impact and its mitigation are the same as under Alternative 1, although potable water usage would be the least among the three community reuse alternatives.</p>

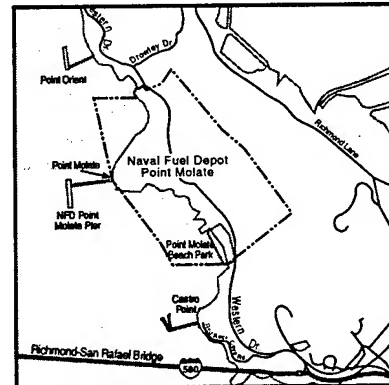
TABLE 2.8-2  
SUMMARY OF SIGNIFICANT ENVIRONMENTAL IMPACTS AND MITIGATIONS UNDER CEQA (CONTINUED)

Resource Area	NAVY ACTIONS		REUSE ALTERNATIVES		
	Navy Disposal	No Action	Alternative 1: Residential/Commercial	Alternative 2: Industrial/Commercial	Alternative 3: Recreation/Commercial
Utilities (Cont.)			Mitigation 2: Replace and upgrade the water distribution system. Ensure that the distribution lines for drinking water meet East Bay Municipal Utility District standards and comply with American Water Works Association standards. Test the fire protection system and upgrade for adequate water pressure. Install individual water meters and integrate water conservation measures into building design and construction. Use equipment, devices, and methodologies that conserve water and provide for long-term efficient water use. Use drought-resistant or native plants, inert materials, and install minimal turf areas.		
Hazardous Materials and Waste	No impacts.	No impacts.	No significant impacts.	No significant impacts.	No significant impacts.

*This page intentionally left blank.*

---

### 3 Affected Environment





---

## CHAPTER 3: AFFECTED ENVIRONMENT

---

### CONTENTS

Page

---

3.1	Land Use .....	3-1
3.2	Visual Resources.....	3-31
3.3	Socioeconomics .....	3-41
3.4	Public Services.....	3-46
3.5	Cultural Resources.....	3-50
3.6	Biological Resources.....	3-59
3.7	Water Resources.....	3-66
3.8	Geology and Soils .....	3-71
3.9	Transportation, Traffic, and Circulation.....	3-79
3.10	Air Quality .....	3-105
3.11	Noise .....	3-117
3.12	Utilities .....	3-123
3.13	Hazardous Materials and Waste.....	3-133

### 3. AFFECTED ENVIRONMENT

This chapter describes the existing environment of the Fleet and Industrial Supply Center, Naval Fuel Depot Point Molate (NFD Point Molate) and surrounding area. The information contained in this chapter serves as background to identify and evaluate environmental impacts resulting from the Department of the Navy (Navy) disposal and community reuse of NFD Point Molate. The environment that could be affected is defined by resource area: land use; visual resources; socioeconomics; public services; cultural resources; biological resources; water resources; geology and soils; transportation, traffic and circulation; air quality; noise; utilities; and hazardous materials and waste. For each resource area, a region of influence (ROI) is defined. An ROI is the geographic area in which environmental impacts on a particular resource could occur. An ROI can be local or regional. Applicable Federal, state, and local plans and policies for each resource area are also considered within the context of this geographical area.

#### 3.1 LAND USE

This section describes NFD Point Molate and surrounding area land uses. The ROI for land use is NFD Point Molate and the City of Richmond's (City) West Shoreline Planning Area.\* This area encompasses the San Pablo Peninsula east to Garrard Boulevard and south to Point Richmond. Military land uses of NFD Point Molate are shown in Figure 3.1-1. Figure 3.1-2 depicts ownership of land surrounding the property. Lands adjacent to NFD Point Molate are owned by a single property owner, Chevron U.S.A. Inc. (Chevron).

NFD Point Molate is located on the San Pablo Peninsula, in the northwest corner of the City, in Contra Costa County, California. The peninsula is isolated from residential and commercial areas of the City. Potrero Ridge, which forms the spine of the San Pablo Peninsula, trends northwest-southeast and separates NFD Point Molate to the west (next to San Francisco Bay [Bay]) from the oil manufacturing activities of the Chevron Richmond Refinery (refinery) to the east (next to San Pablo Channel).

##### 3.1.1 NFD Point Molate

NFD Point Molate was operated by Navy as a fuel storage and distribution facility. The property occupies about 413 acres (167 hectares [ha]), consisting of 313 acres (127 ha) of

---

\* The West Shoreline Planning Area is one of several planning areas for which area-specific guidelines are set forth in the City of Richmond General Plan. The General Plan would be applicable to NFD Point Molate after it is conveyed out of Federal ownership, and the NFD Point Molate property would be included in the West Shoreline Planning Area.

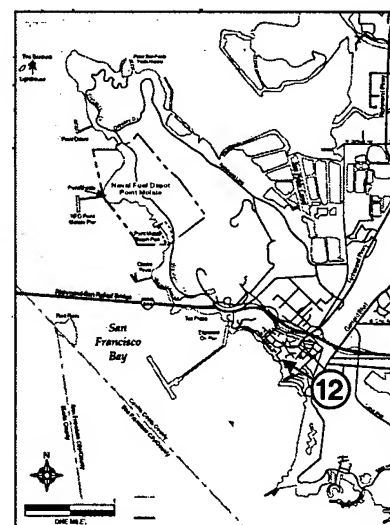
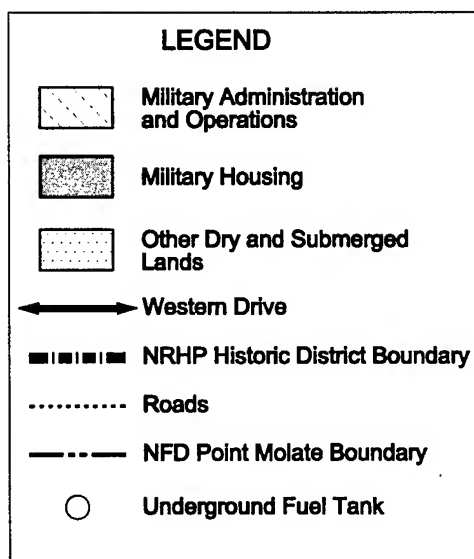
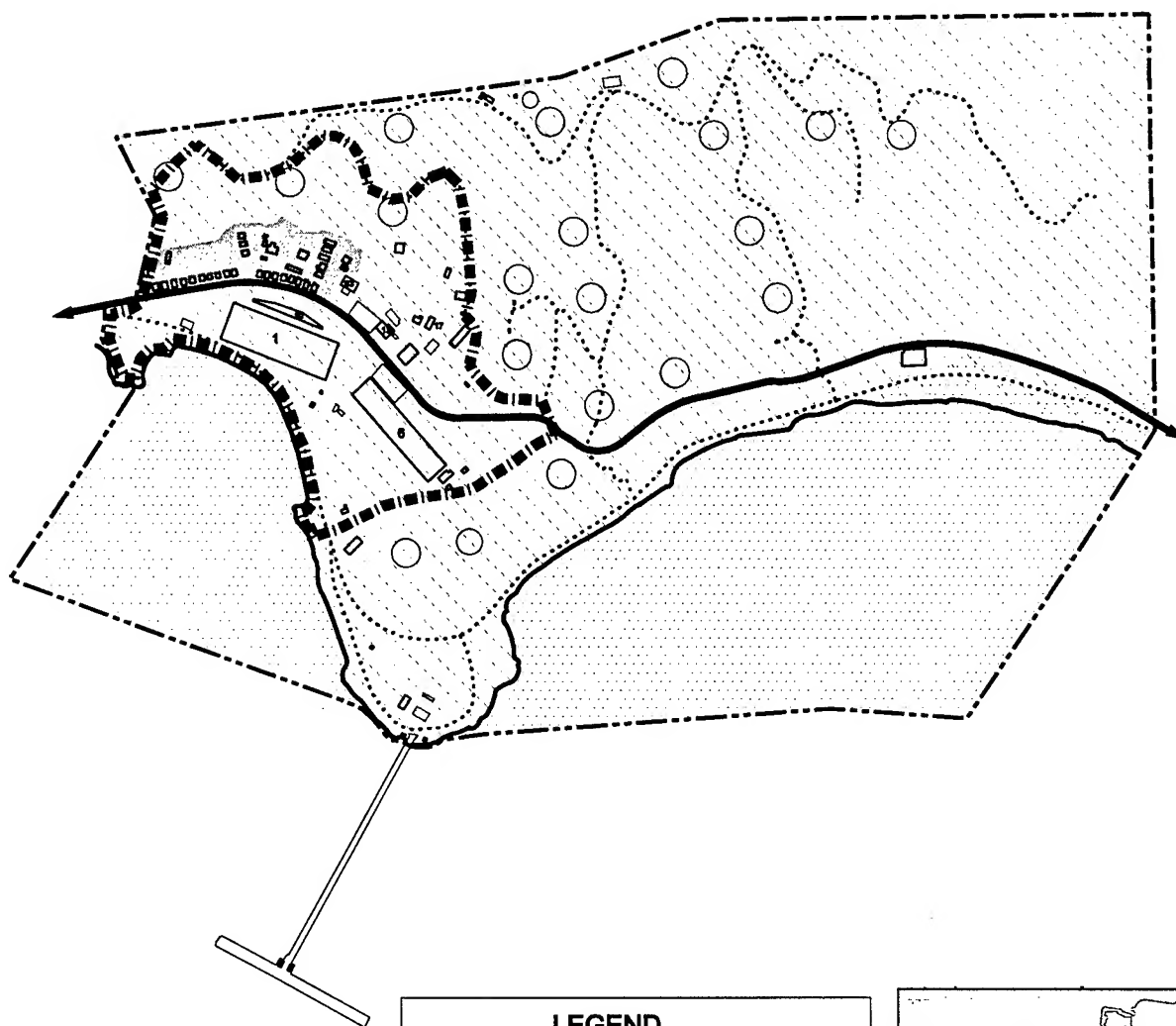
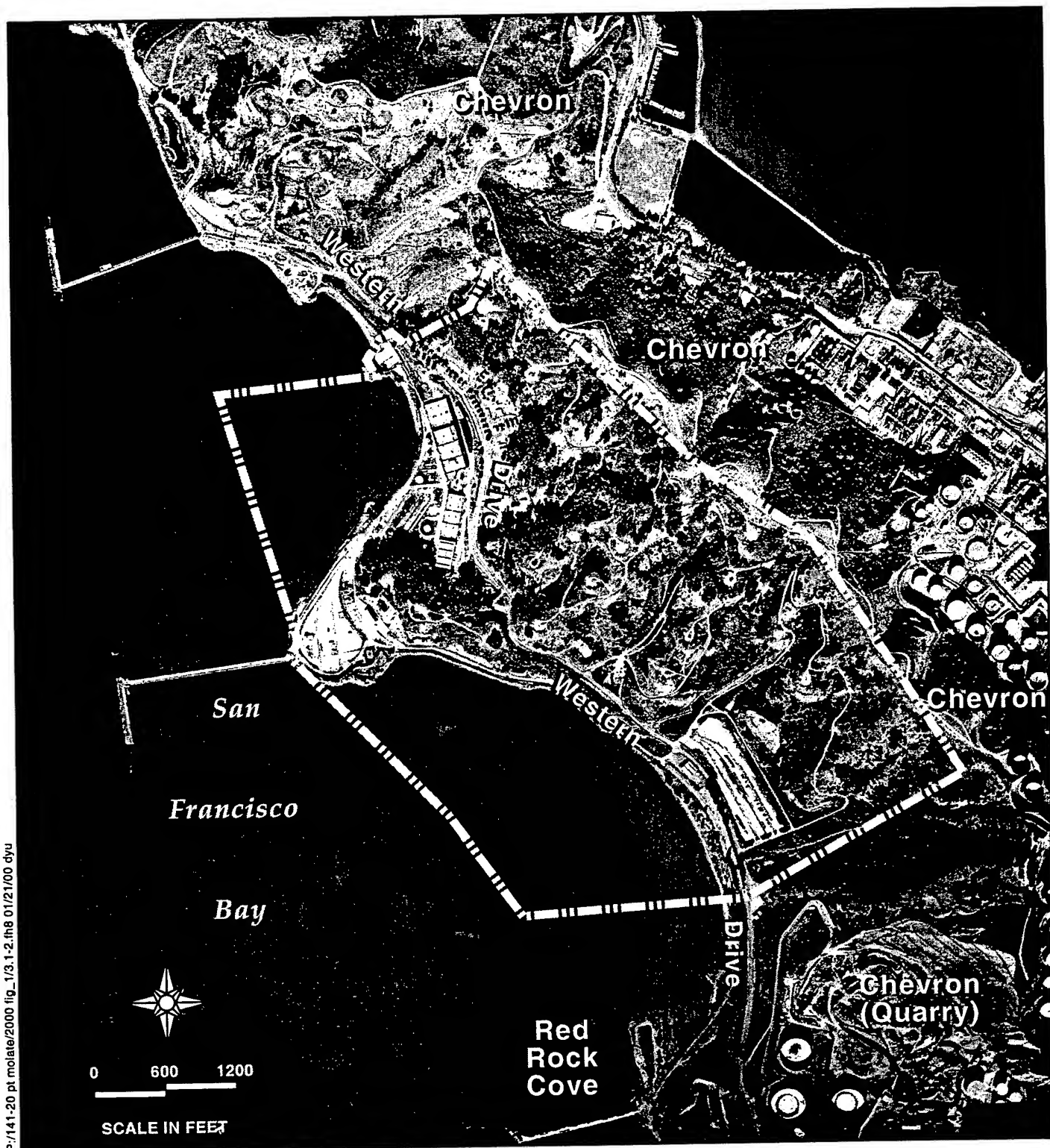


Figure 3.1-1: Land Uses at NFD Point Molate



P:\141-20 pt molate\2000 fig\_1\3.1-2.fh8 01/21/00 dyu

Source: Pacific Aerial Surveys 1996

Figure 3.1-2: Existing Land Ownership Surrounding the NFD Point Molate Property

dry land and 100 acres (40 ha) of submerged lands. The property is about 1.5 miles (2.4 kilometers [km]) north of Interstate 580 (I-580) and the Richmond-San Rafael Bridge. Western Drive provides the only public road access to NFD Point Molate and the San Pablo Peninsula. Western Drive is directly accessible to westbound traffic on I-580 but only indirectly accessible to eastbound traffic on I-580. NFD Point Molate access roads are off of Western Drive. There are two secondary roads to the NFD Point Molate pier and two to the military housing area. These roads are secured to prevent public access. Access roads to the oil/fuel storage facilities are gated or chained.

NFD Point Molate ceased its fueling mission in May 1995 and was operationally closed on September 30, 1998. It is currently in caretaker status.

#### *Military Administration and Operations*

Land uses at NFD Point Molate are associated with its mission to store and distribute fuel for the Pacific Fleet (Figure 3.1-1). Fuel storage tanks were buried in the hillside areas. Pipelines, rail lines, and a pier were constructed to transport fuel from the storage tanks to Navy vessels at the pier.

Before Navy acquired NFD Point Molate, the northern part of the site was the location of California's largest winery (Winehaven), which operated from 1907 until Prohibition forced it to close in 1919. The winery buildings included a winery, distillery, bottling facility, wharf, hotel, school, post office, steam generation plant, and a company town with 29 cottages. By 1960, Navy had modified some of the original winery structures and demolished others. In 1978, the remaining original winery structures were designated as the Winehaven Historic District and placed on the National Register of Historic Places (NRHP).

Facilities for oil/fuel storage and distribution occupy roughly 90 acres (77 ha) of the property and consist of 20 large underground storage tanks (USTs), 24 miles (39 km) of fuel/oil pipelines, access roads to the USTs, pumphouses, and a laydown area. A pier extends 1,450 feet (442 meters [m]) into the Bay from the shoreline. The concrete and wood pier is T-shaped and has pipelines and a transfer operation facility on it. Oil/fuel was pumped between the USTs and military vessels docked at the pier.

Administration, storage, and maintenance facilities associated with oil/fuel storage and distribution operations are located in the Winehaven Historic District in the northern part of the property. These facilities encompass about 25 acres (10 ha). Most of the buildings are surviving structures from the winery operations and were used by Navy. These buildings include warehouses, offices, storage sheds, maintenance structures, and a fire station.

At the southern end of the property is a 17-acre (7-ha) waste disposal area that was used for industrial and residential waste. It is currently part of the Installation Restoration Program (IRP) (Section 3.13.2). In the northern part of the property, west of the winery buildings, is an 11-acre (4.5-ha) industrial wastewater treatment area. A treatment plant with adjacent aeration ponds handled oily wastewater, ballast, wastewater, and fuel. The system was installed in 1942, reconditioned in 1996, and is scheduled for closure under the IRP (U.S. Navy 1998c).

### ***Military Housing***

A military housing area occupying about 5 acres (2 ha) is located entirely within the Winehaven Historic District. The area has 29 cottages, a tennis court, playground, small baseball field, and picnic area. The cottages were originally built for winery personnel and were used by Navy personnel until 1994. They are currently in layaway status. All 29 cottages are contributing elements to the NRHP designation.

### ***Other Dry and Submerged Lands***

There are 18 acres (7 ha) of upland area at NFD Point Molate that are used by the City for Point Molate Beach Park. The park is located in the southwest corner of the property and includes a paved parking area, landscaped play area with play structures, picnic tables, portable toilets, and shoreline access. The park is open to the public daily from dawn to 9 P.M.

One hundred acres (40 ha) of NFD Point Molate consist of submerged Bay lands to the north and south of the point of land known as Point Molate (the Point) (at the base of the pier).

### **3.1.2 Surrounding Land Uses**

Most of the land on the San Pablo Peninsula is owned by Chevron, which operates one of the largest refineries on the West Coast. Land uses are primarily maritime and industrial, with limited recreation and commercial uses. These land uses include buffer areas of open hillsides and undeveloped shoreline.

### ***Land Uses to the South***

Chevron also owns the property immediately to the south of NFD Point Molate. On the east side of Western Drive, to the south, is a small ridge that separates an active quarry operation from NFD Point Molate. The quarry is operated by Dutra Materials. Further south, land is used for aboveground fuel storage. The nearest fuel storage tank is about 2,000 feet (610 m) from NFD Point Molate's southern boundary (Figure 3.1-2). On the west side of Western Drive is Red Rock Cove and the Castro Point pier. This area was used for maritime shipping but is now vacant. About 1 mile (1.6 km) south of NFD Point Molate is a California Department of Transportation (Caltrans) maintenance

facility and storage yard, just south of which is I-580 and the toll plaza for the Richmond–San Rafael Bridge (Figures 3.1-3, 3.1-4, and 3.1-5).

#### *Land Uses to the East*

The top of Potrero Ridge topographically separates west-facing NFD Point Molate from the oil refinery manufacturing and storage uses on the east side of the ridge (Figure 3.1-6). The nearest aboveground fuel storage tank on refinery property is about 300 feet (92 m) from the southeast corner of NFD Point Molate (Figure 3.1-2). The main refinery operations area is about 1,000 feet (300 m) east of the nearest NFD Point Molate boundary. North of the refinery area is Chevron's employees-only rod and gun club. The club has extensive recreational facilities, including a marina on San Pablo Bay. There are no hiking trails on any of the Chevron property, and recreational use of the property is confined to the rod and gun club, which is fenced (Chevron 1999a).

#### *Land Uses to the North*

To the north of NFD Point Molate, the area is predominantly open hillsides that the refinery uses as buffer lands (Chevron 1999a). There is a private pistol and rifle range to the east of Western Drive and Point Orient pier, which is now inactive, to the west of Western Drive. All the refinery property is fenced, gated, signed, and closed to the public. To the north of the refinery property, near the end of the peninsula, is the Port of Richmond's Terminal No. 4. The Port leases the site to Paktank, an importer/exporter of bulk liquids, such as vegetable oil and petroleum products (Figures 3.1-3 and 3.1-7).

At the end of Western Drive, less than 1 mile (1.6 km) northeast of NFD Point Molate, is the Point San Pablo Yacht Harbor. The yacht harbor is privately owned and has about 200 berths and a small restaurant. The harbor contains mostly fishing boats and houseboats, along with a few sport and sail boats (Figures 3.1-3 and 3.1-8).

One mile (1.6 km) to the northwest of NFD Point Molate, about 1,000 feet (30 m) offshore, are the two Brothers Islands. The larger of the two islands, East Brother Island, is about one acre (0.4 ha) in size (Figure 3.1-7). Historically it was a Coast Guard lighthouse station. It is now operated as a commercial bed and breakfast and is on the NRHP.

#### *Accidental Release of Toxic Air Contaminants from Surrounding Land Uses*

Section 112(r) of the Clean Air Act (CAA) (42 United States Code (U.S.C.) § 7412[r]) and California State Senate Bill (SB) 1889 (California Health & Safety Code, Chapter 6.95, Sections 25531-25543.3) are implemented in California by the California Accidental Release Prevention Program (CalARP). In Contra Costa County, the CalARP program is administered by the Contra Costa County Health Services

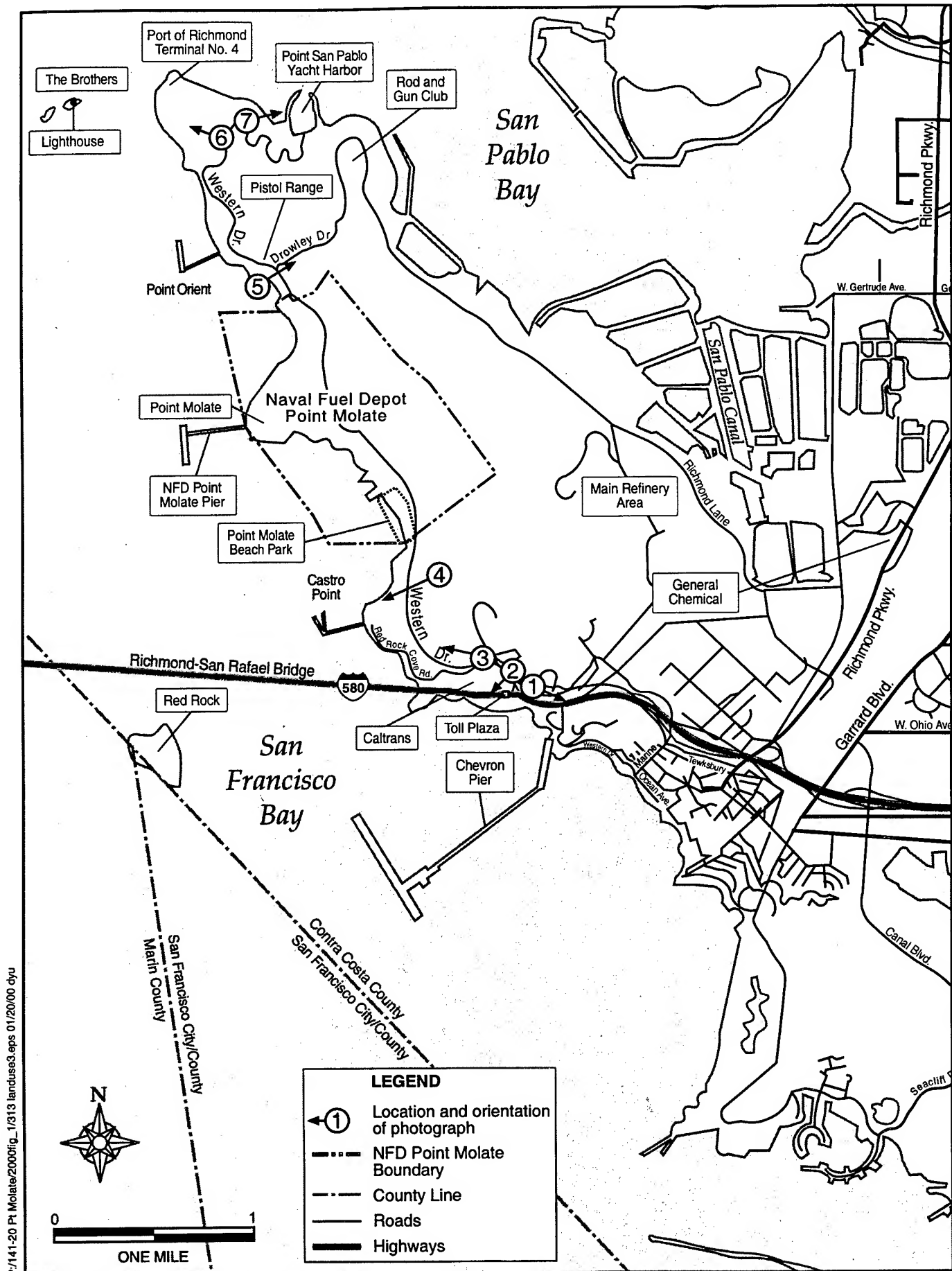


Figure 3.1-3 Surrounding Land Uses Photo Locations



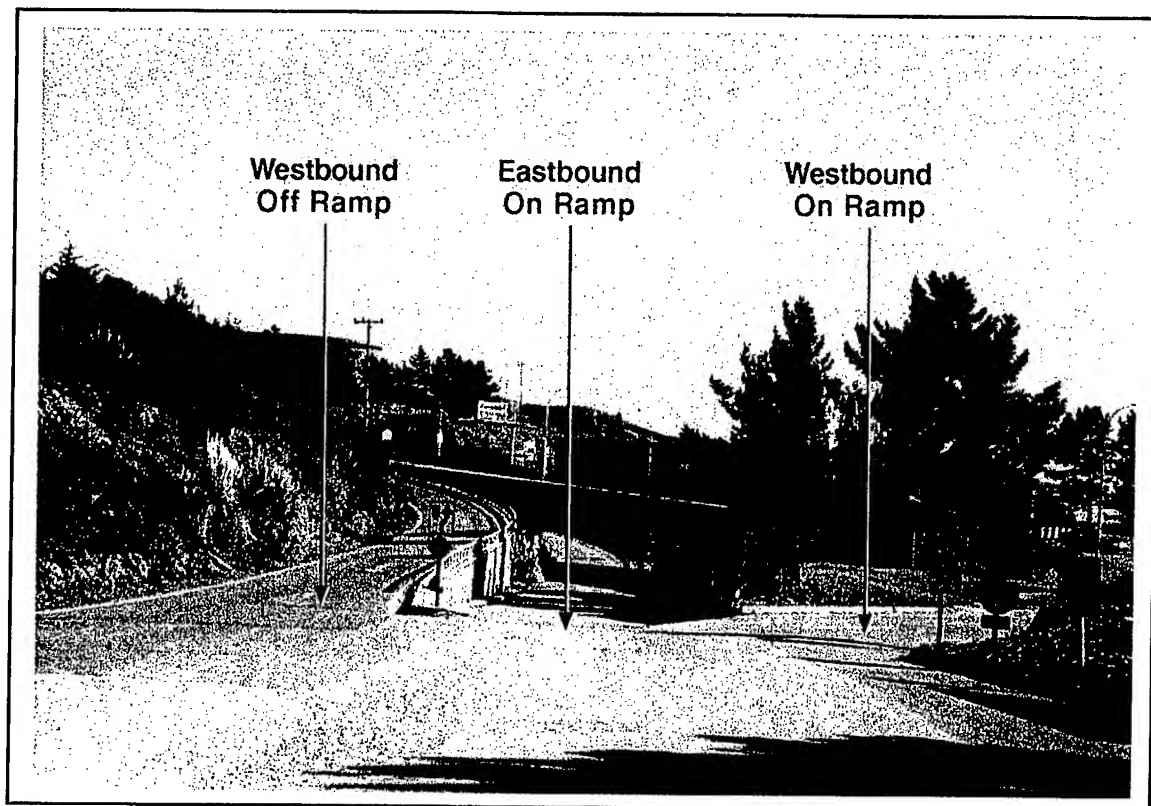


Photo Location 1: On and Off Ramps to I-580 from Western Drive

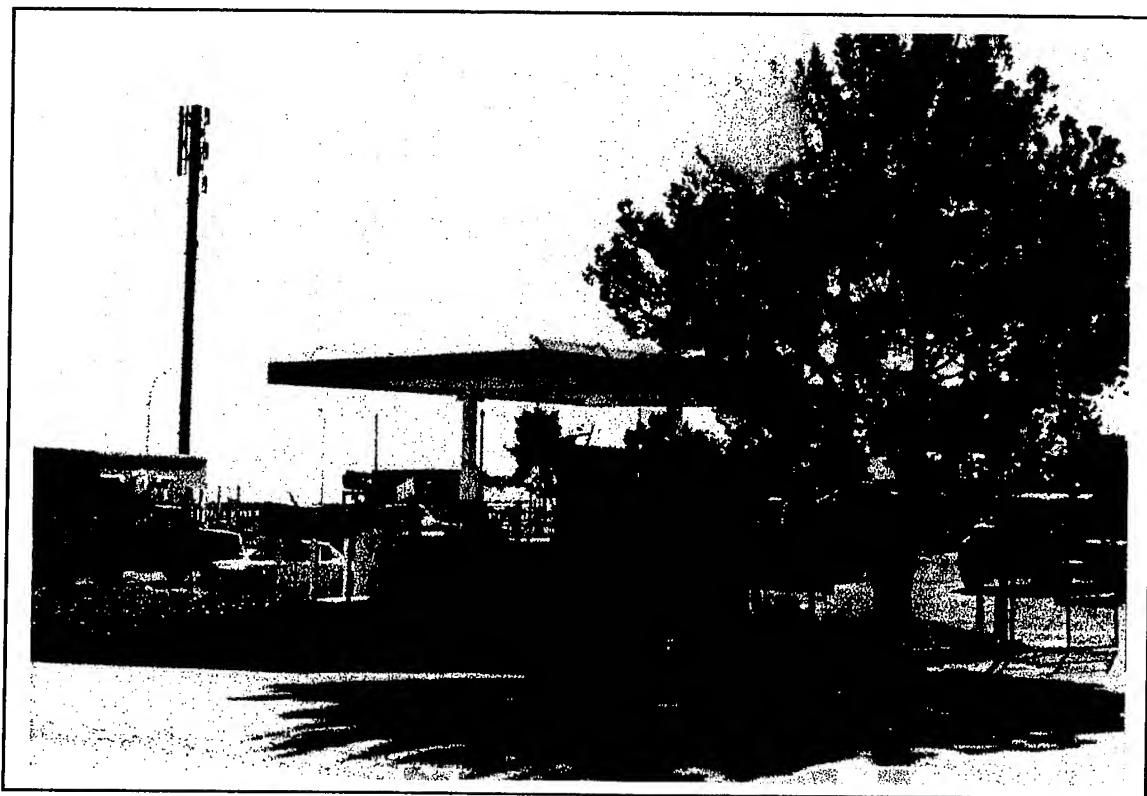


Photo Location 2: Caltrans Bridge Maintenance Station

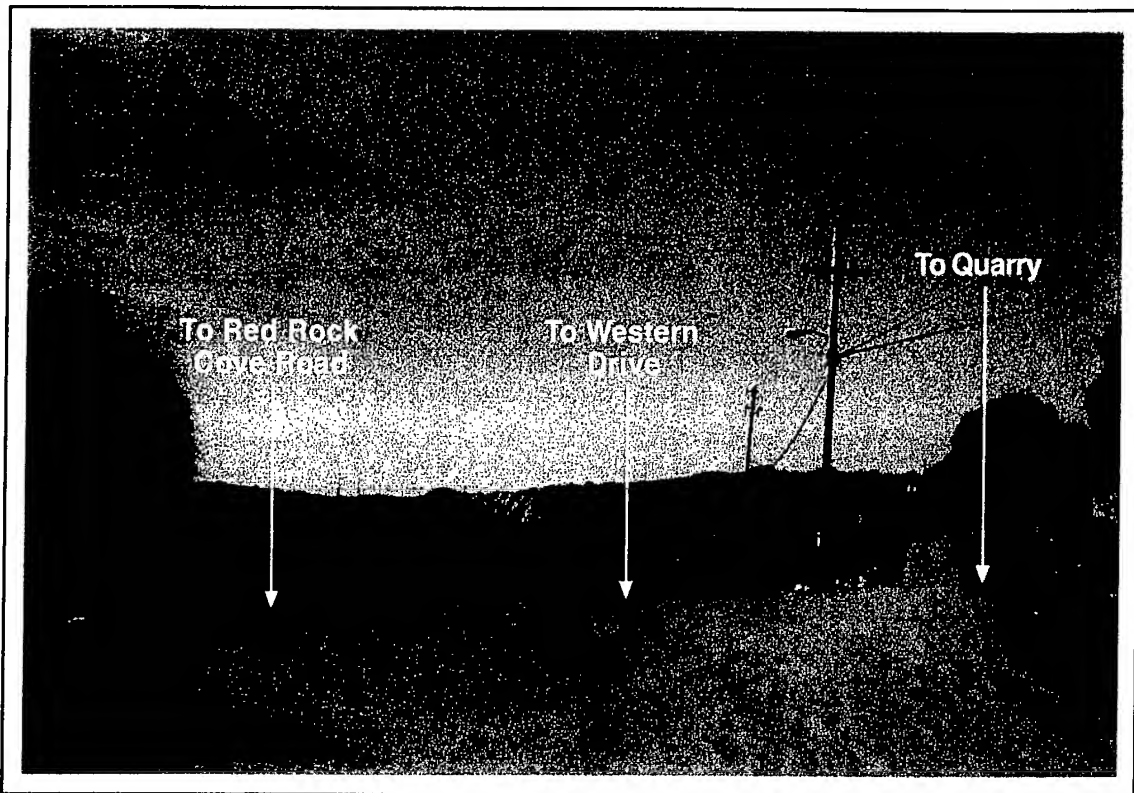


Photo Location 3: Road to Red Rock Cove (left,) Western Drive (center) and Road to Dutra Materials Quarry (right)

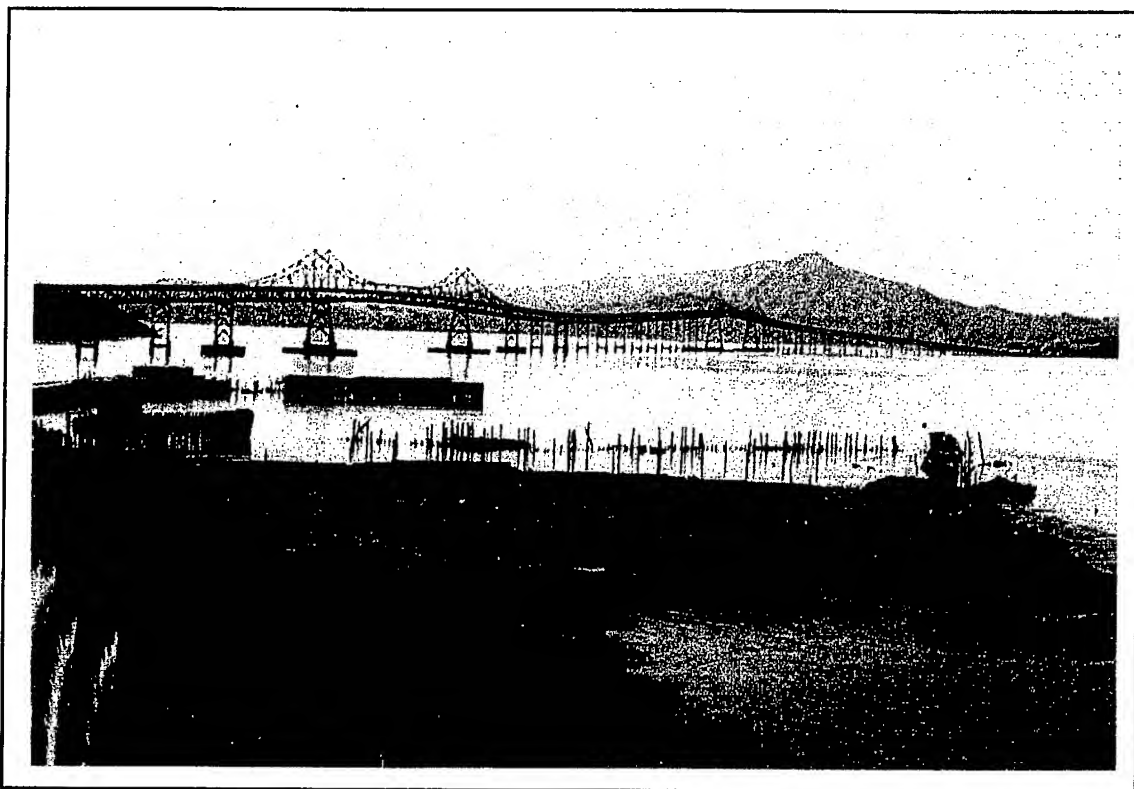


Photo Location 4: Red Rock Cove

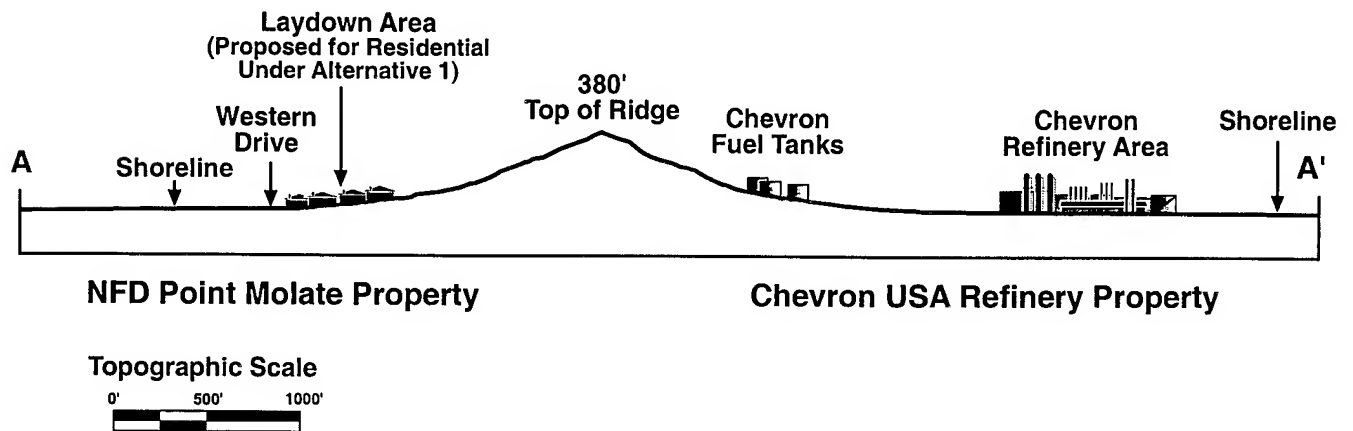
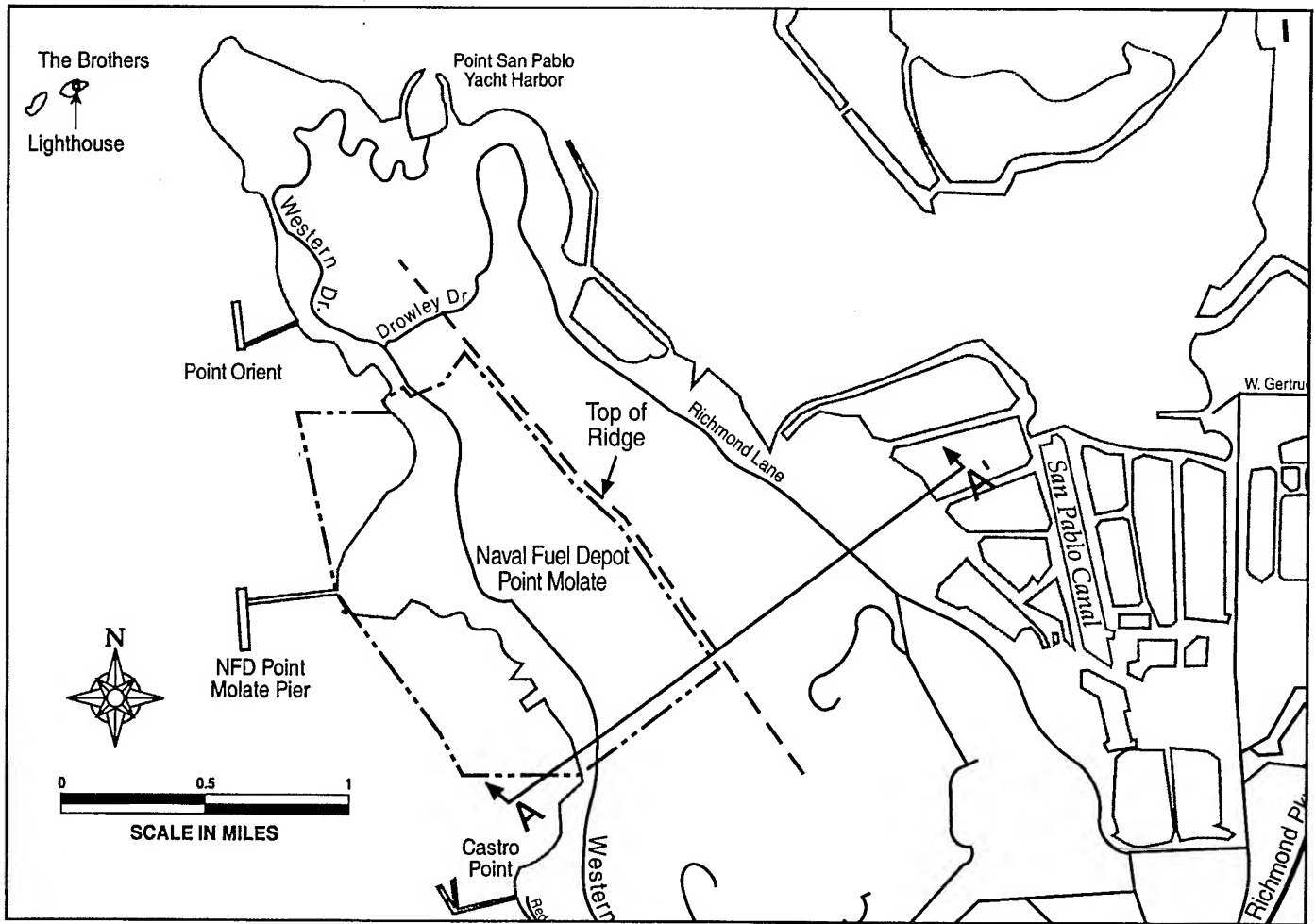




Photo Location 5: Entrance to Chevron's Rod and Gun Club at Drowley Drive

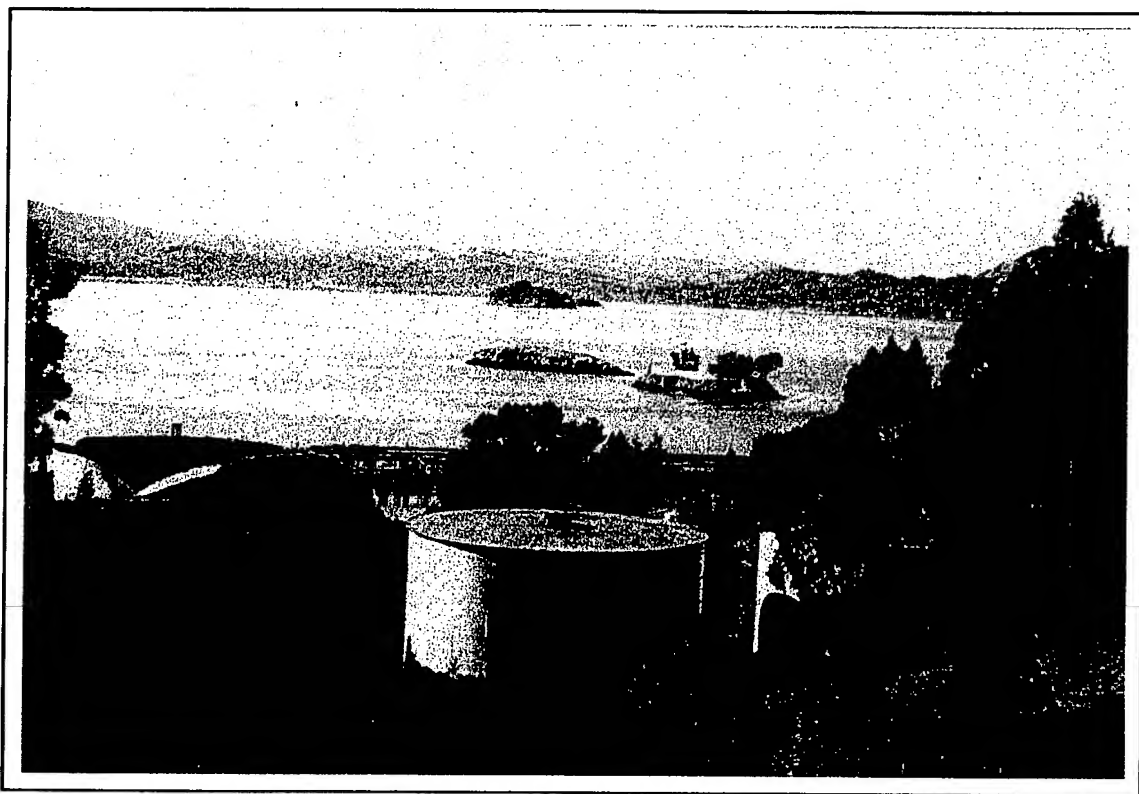


Photo Location 6: Port of Richmond Property (leased to Paktank) in Foreground with Brothers Island in Background

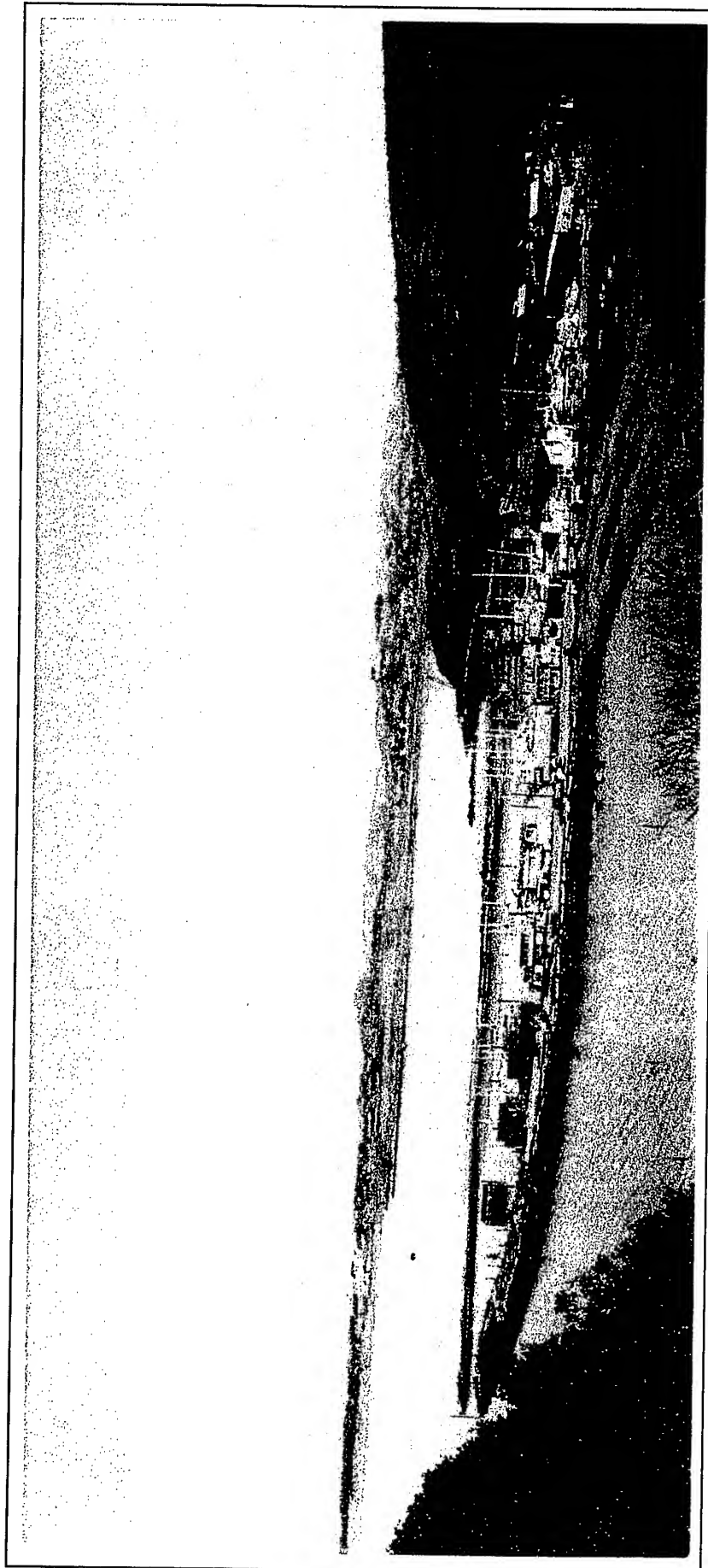


Photo Location 7: Point San Pablo Yacht Harbor

Figure 3.1-8: Land Uses to the North of the NFD Point Molate Property (cont.)

Department. CalARP requires that facilities using or storing toxic and flammable substances prepare a Risk Management Plan (RMP). These plans serve to inform the public of potential accident factors associated with such industries so that the public can make informed decisions regarding these factors. The RMP must include an analysis of a Worst-Case Scenario (WCS) for the accidental releases of toxic or flammable substances (listed in 40 Code of Federal Regulations (C.F.R.) 68.130), as well as an Alternate Release Scenario (ARS). The United States Environmental Protection Agency (U.S. EPA) definition of a WCS is "the release of the largest quantity of a regulated substance from a vessel or process line failure, and the release that results in the greatest distance to the endpoint for the regulated toxic or flammable substance." The ARS is a release scenario that is considered more likely to occur than the WCS (40 C.F.R. Part 68.28). For an ARS, the most vulnerable equipment associated with the hazardous material is usually identified, and the consequences of an accident occurring associated with this equipment is modeled.

U.S. EPA describes the likelihood of a WCS and ARS as follows: "It is generally not possible to provide accurate numerical estimates of how likely it is that these scenarios will actually happen. Quantifying risk for accident scenarios is rarely feasible because there are few data related to rates for equipment failure and human error. In general, the risk of a worst-case scenario occurring is low. Although catastrophic vessel failures have occurred, they are rare events. Combining them with worst-case weather conditions (as required by the RMP regulation) makes the overall scenario even less likely. This does not mean that such events cannot or will not happen, but they are very unlikely to happen. For the alternative scenario, the likelihood of the release is greater and will depend, in part, on the scenario chosen" (U.S. EPA, 1999).

For each RMP scenario, there is a "scenario circle" in which an accident site and endpoint distance are shown. The scenario circle extends from the accident site to the endpoint distance. The endpoint is the distance at which accident impacts (chemical concentrations, heat, fire, or wave force from an explosion) are not expected to affect the long-term health of the public. U.S. EPA has defined an endpoint for each regulated toxic chemical or flammable gas (40 C.F.R. Part 68, Appendix A).

The area affected by a release, represented by the scenario circle, is estimated by computer modeling, which simulates the release of a material and its subsequent behavior in the environment. The size of the scenario circle is influenced by many factors, including the physical properties of the material, the circumstances of its release from the containment system, environmental conditions at the time of the release, and the topography of the surrounding area. Some of these factors are addressed using actual data (such as physical properties of the material), some are based on engineering judgment, and some are not addressed at all (for example, topography, which would

require very complex modeling). Thus, the output of computer models depends on the assumptions made in their development and in the selection of input parameters.

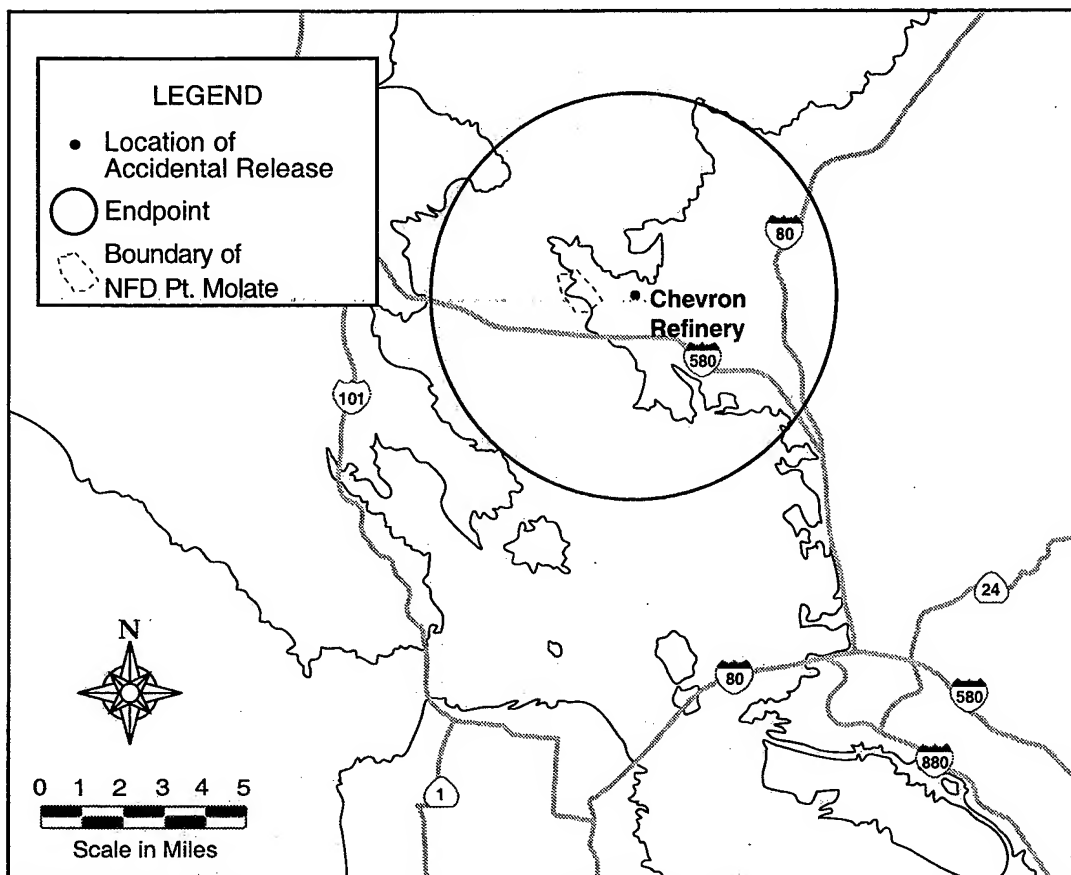
Based on modeling performed by Chevron Refinery and General Chemical for compliance with CalARP requirements, these facilities have toxic and/or flammable chemicals that could, if released, affect NFD Point Molate. Chevron Refinery's RMP results show that NFD Point Molate could be affected by a WCS and an ARS release of ammonia from a refrigeration system and a WCS release of flammable substances (Chevron 1999) (Figures 3.1-9 and 3.1-10). The General Chemical RMP (General Chemical 1999) shows that NFD Point Molate could be affected by a WCS for oleum (Figure 3.1-10).

Chevron modeled releases of ammonia and oleum with several different assumptions. U.S. EPA guidance for the RMP allows use of "neutrally stable" weather conditions for modeling ARS releases, while Contra Costa County Health Services Department, the local administering agency for CalARP, requires that "stable" weather conditions be assumed. Stable conditions result in less dispersion (mixing with the atmosphere) of the released material and a larger impact area than do neutrally stable conditions. Table 3.1-1 summarizes the results of Chevron and General Chemical RMP modeling under different weather conditions and with and without mitigation measures at the source of the release. It can be seen that modeling using the neutrally stable weather conditions allowed in U.S. EPA guidance yields a toxic endpoint for ammonia under the ARS that does not affect NFD Point Molate.

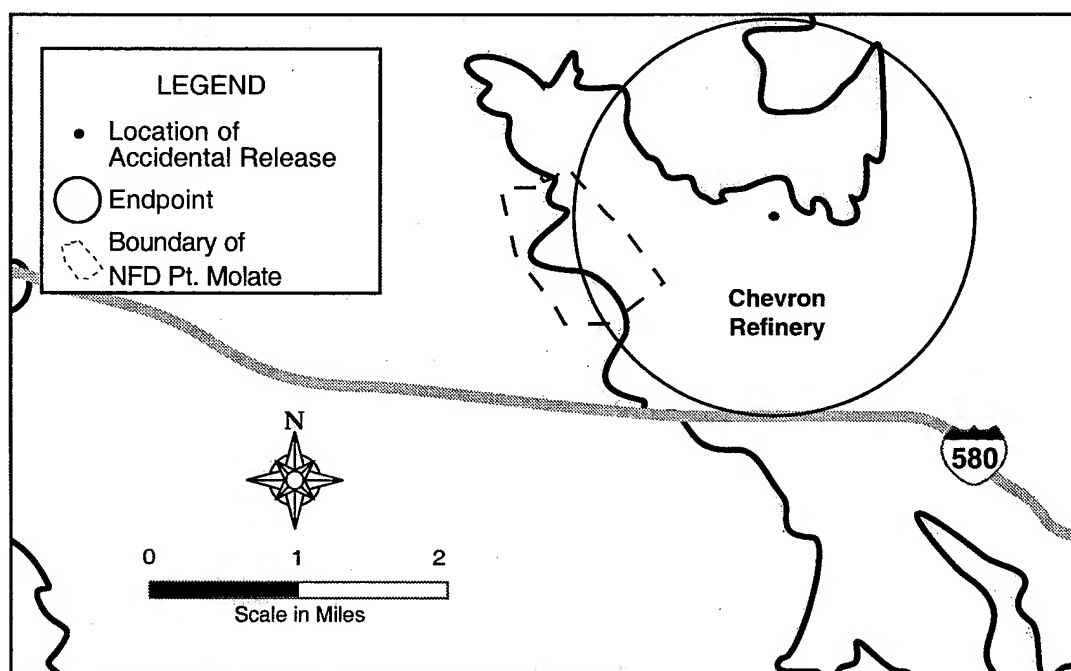
For toxic chemical releases, the area affected by a release is influenced by the predominant wind direction at the time an accident occurs. The prevailing wind direction on San Pablo Peninsula is to the east. Winds blow from the Chevron Refinery towards NFD Point Molate (northeast to east-southeast) about 13 percent of the time and from the General Chemical Plant towards NFD Point Molate (east and east-southeast) about 1 percent of the time (BAAQMD 1999c). None of the modeling takes into account topography. It is likely that, for toxic material releases (not flammables), the 400-foot high Potrero Ridge would impede the movement of an ammonia release towards NFD Point Molate.

The RMP scenario circles represent areas that could be affected by releases under certain modeling assumptions. As discussed above, the modeling does not estimate the likelihood of the releases and therefore cannot quantify the risks associated with them.

Information about the chemical properties of ammonia that would affect its behavior in case of an accidental release is provided below. Oleum is not described further because only ARS releases are considered in the impacts analysis, in accordance with NEPA and



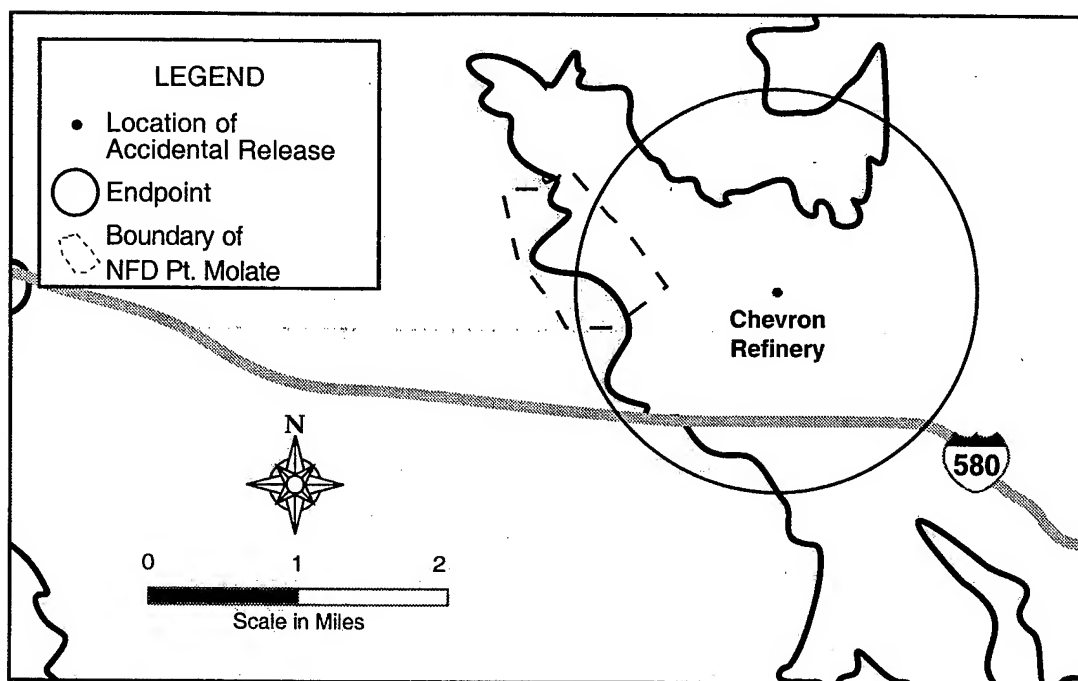
Ammonia: Worst-Case Release Scenario (5-Mile Radius)



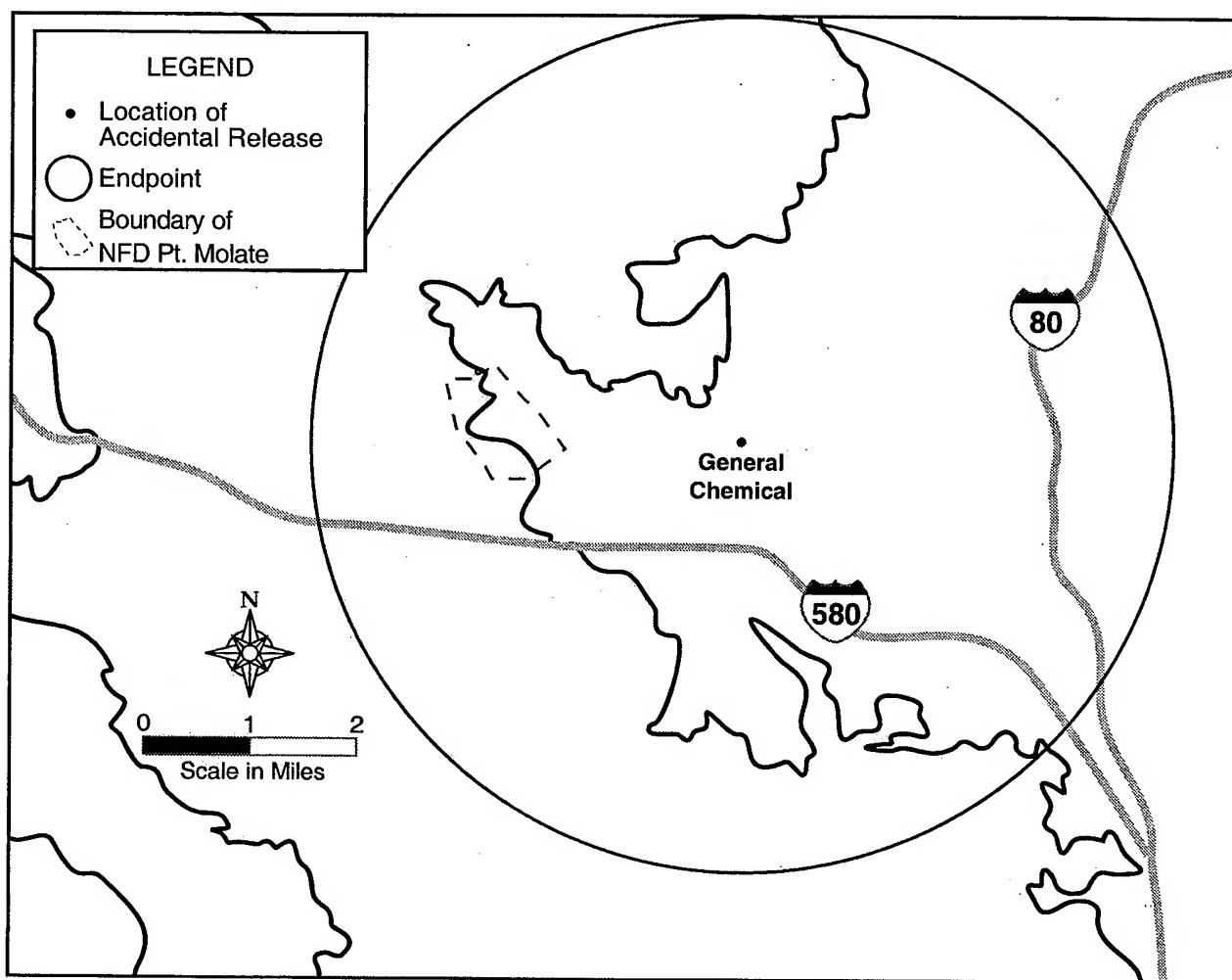
Ammonia: Alternate Release Scenario (1.3-Mile Radius)

Figure 3.1-9: Accidental Release Endpoints for Ammonia





Flammables: Worst-Case Release Scenario, Chevron (1.3-Mile Radius)



Oleum: Worst-Case Release Scenario, General Chemical (4-Mile Radius)

Figure 3.1-10: Accidental Release Endpoints for Flammables and Oleum

CEQA guidance on evaluating “reasonably foreseeable,” rather than “worst-case,” adverse effects.

**TABLE 3.1-1**  
**RMP MODELING FOR CHEVRON REFINERY AND GENERAL CHEMICAL**

FACILITY	MATERIAL	TYPE OF RELEASE	DISTANCE TO TOXIC ENDPOINT (MILES)	ASSUMPTIONS
Chevron	Ammonia	WCS	5.0	No active mitigation measures at source.
		ARS	1.6	Stable weather conditions.
		ARS	1.3	Stable weather conditions, water spray mitigation at source.
		ARS	0.85*	Neutrally stable weather conditions.
		ARS	0.65*	Neutrally stable weather conditions, water spray mitigation at source.
Chevron	Flammables	WCS	1.3	No active mitigation measures at source.
		ARS	0.09*	Stable weather conditions.
		ARS	0.05*	Neutrally stable weather conditions.
General Chemical	Oleum	WCS	4.0	Stable weather conditions.
		ARS	0.92*	Stable weather conditions.

Source: Chevron 1999 and General Chemical 1999.

\* These toxic endpoints would not affect NFD Point Molate.

#### *Properties of Ammonia Releases*

Ammonia is the name for the chemical compound  $\text{NH}_3$ , also commonly referred to as anhydrous ammonia. Ammonia is a highly efficient refrigerant. At room temperature, ammonia is a pungent, colorless, lighter-than-air gas. Thus, ammonia molecules tends to rise when released in air. In refrigeration systems, ammonia is maintained under pressure and occurs as both a gas and as a liquid. Both of these phases are much cooler than room temperature. If released from a container, ammonia gas forms an expanding, lighter-than-air cloud that tends to follow air currents and disperse. If released from a container as a liquid, ammonia vaporizes, becoming a gas that can contain suspended

droplets of liquid ammonia. These liquid droplets cause the overall cloud to be denser than the surrounding air. A denser-than-air cloud sinks towards the ground until the ammonia is warmed by the surrounding air. The cloud then becomes a lighter-than-air vapor that follows air currents and disperses.

Because ammonia has a high affinity for absorption in water, safety systems such as scrubbers and fogging systems are very effective in controlling releases of ammonia.

Ammonia has a strong, pungent odor that can be sensed by the human nose at concentrations as low as 5 parts per million (ppm) in air. This odor threshold concentration is well below levels that pose a health hazard. Thus, the odor of ammonia can provide an early warning signal that allows healthy, able-bodied individuals to evacuate contaminated areas or take protective actions before being exposed to hazardous levels of ammonia. However, physical constraints or physical impairments could hinder evacuation efforts.

The degree of hazard posed by ammonia is dependent on both the concentration of ammonia in the air and the duration of the exposure. For example, exposure to a 500 ppm cloud of ammonia for one hour can cause irritation of eyes, nose, and throat. Similar effects could be experienced in only a few minutes of exposure to a 1,500 ppm cloud.

To assess the risks posed by ammonia to the general public, EPA's RMP program uses the American Industrial Hygiene Association's (AIHA's) Emergency Response Planning Guidelines (ERPGs) ERPG-2 exposure level, which is 200 ppm. This concentration is the maximum airborne concentration below which it is believed that nearly all individuals could be exposed for up to one hour without experiencing or developing irreversible or other serious health effects or symptoms that could impair an individual's ability to take protective action (AIHA 1988).

### 3.1.3 Plans and Policies

The plans, policies, and zoning ordinances discussed below are relevant to the disposal and reuse of NFD Point Molate.

#### *Federal*

#### **Coastal Zone Management Act**

Under the Coastal Zone Management Act of 1972, 16 U.S.C. §§ 1451-1465, as amended, any Federal project or activity must be consistent to the maximum extent practicable with the provisions of Federally approved state coastal plans. The coastal management plan for the west shore of the City is the Bay Conservation and Development Commission's (BCDC) *San Francisco Bay Plan* (Bay Plan). In addition, the Metropolitan

Transportation Commission's (MTC) *San Francisco Bay Area Seaport Plan* is fully integrated into the Bay Plan.

#### **State**

##### **McAteer-Petris Act**

In 1965 the California Legislature passed the McAteer-Petris Act, California Public Resources (Cal. Pub. Res.) Code Section 66600, which mandated study of the Bay, preparation of a plan (Bay Plan), and formation of BCDC. BCDC is the regulatory agency responsible for maintaining and carrying out the provisions of this law. When NFD Point Molate is no longer under Federal ownership, BCDC jurisdiction at NFD Point Molate will include all areas within 100 feet (30 m) inland of mean high tide and all tidal marsh areas up to an elevation of 5 feet (1.5 m) above mean sea level.

The Bay Plan was adopted by BCDC in 1968, enacted by the California legislature in 1969, and revised in 1998. It contains policies to protect the Bay's economic and natural resources and also designates shoreline regional priority use areas (BCDC 1998). These policies determine regulatory decision-making by BCDC. After conveyance, the Bay Plan regional priority use designation of "Waterfront Park, Beach" would apply to the shoreline of NFD Point Molate that is under BCDC jurisdiction.

Policies from the Bay Plan relevant to NFD Point Molate are summarized below:

- From Point Molate to Point Richmond, develop riding and hiking trails (Bay Plan Policy #5).
- Acquire and develop NFD Point Molate for a park. Existing underground fuel storage tanks may be used by industry (Bay Plan Policy #6).
- Extend Point Molate Beach Park to Castro Point (Bay Plan Policy #7).

##### **State Lands Commission**

The California State Lands Commission (SLC) has jurisdiction over all tidelands and submerged lands owned by the State of California. These lands must be used for purposes consistent with the public trust, such as maritime commerce, navigation, fishing, environmental, and recreational purposes.

At NFD Point Molate, tidelands and submerged lands within the NFD Point Molate boundary, as well as the submerged lands beneath the T-shaped pier, are subject to SLC public trust jurisdiction. In 1935, the state legislature granted the day-to-day administration of these lands to the City, with regulatory oversight provided by the SLC (SLC 1998).

## **Regional**

### **Association of Bay Area Governments**

The Association of Bay Area Governments (ABAG) is a regional planning agency for the nine counties surrounding the Bay. ABAG is the lead agency for the Bay Trail Project, which was established in 1987 by SB 100 to produce a "Ring around the Bay." The Bay Trail preserves and makes available land around San Francisco Bay for recreational, educational, and aesthetic purposes. The Bay Trail Plan (ABAG 1998) envisions "spine trails" that encircle the Bay; "spur trails" from the spine trails to points of natural, historic, and cultural interest along the Bay shoreline; and "connector trails" to recreational opportunities, as well as residential and employment centers inland from the Bay.

The Bay Trail Plan designates a spur trail that would follow along the western shoreline of San Pablo Peninsula and around the northern tip to the Point San Pablo Yacht Harbor (Figure 3.1-11). The spur trail would connect to a spine trail near I-580 at Western Drive. See Section 3.9 (Transportation, Traffic, and Circulation) for more information on bicycle and pedestrian access.

### **East Bay Regional Park District**

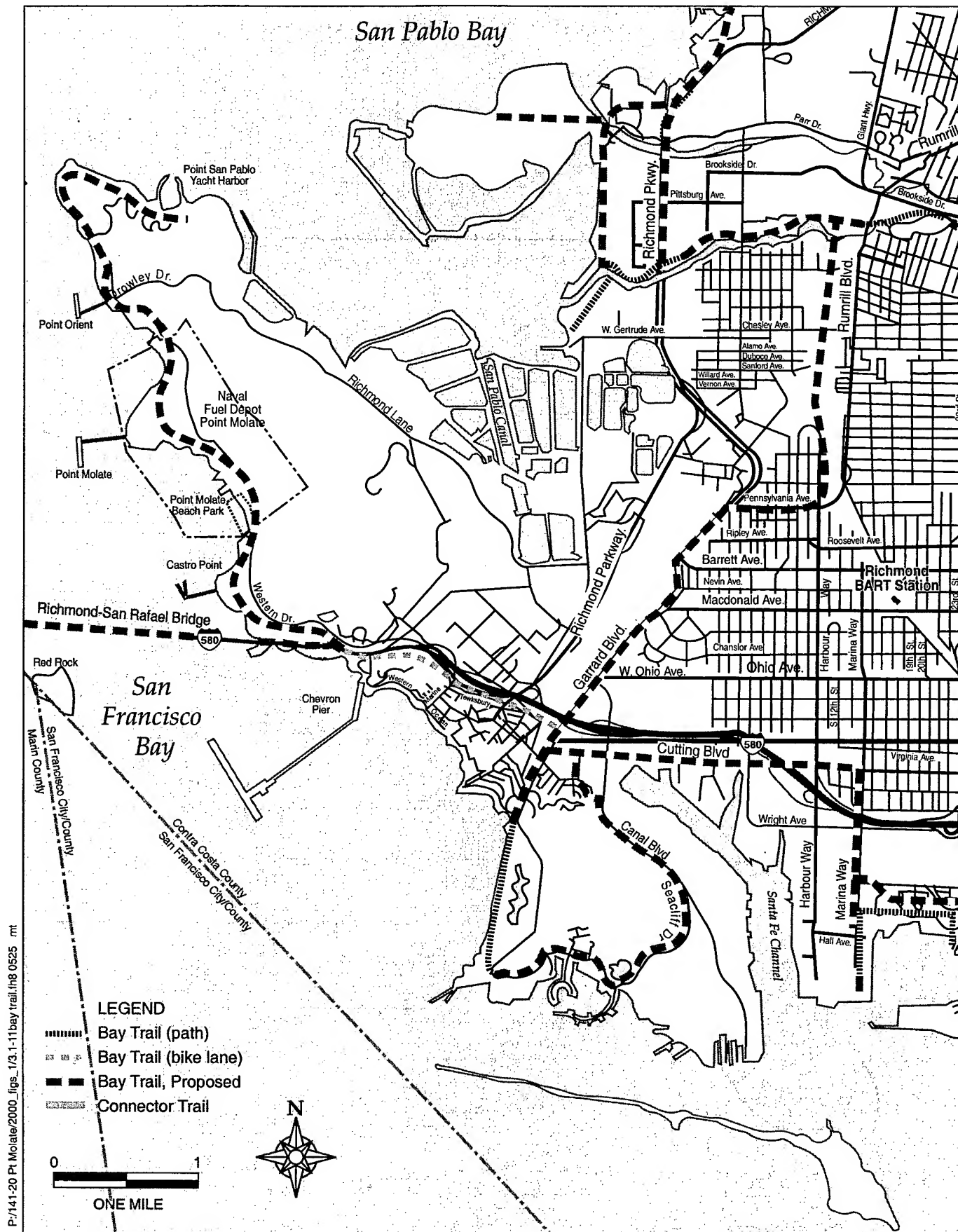
The East Bay Regional Park District (EBRPD) is responsible for developing and operating a regional park system in the East Bay. EBRPD supports the Bay Trail Plan and has included it in the EBRPD Master Plan and 1988 financing program (Measure AA). The desired EBRPD alignment at NFD Point Molate is along the shoreline following a railroad right-of-way, continuing north and encircling the entire San Pablo Peninsula.

## **Local**

### **City of Richmond**

The City has land use authority for property under local jurisdiction through its General Plan and Zoning Ordinance. The 1994 General Plan provides a blueprint for growth and development in the City as required under state law. The General Plan Land Use Map (most recently amended in 1996) spatially depicts the land use categories in the General Plan. The General Plan has nine elements, which interact as an integrated whole. Primary of these is the Land Use Element. This element provides a broad outline of what the City will look like and how the City will guide future development.

The City's Zoning Ordinance provides the standards and regulations to enforce the goals and policies of the General Plan. Under state law, the zoning ordinance must be consistent with the General Plan. Below is a discussion of the current land use and zoning designations in the immediate vicinity of NFD Point Molate, as well as the land use policies that could be applicable to the property under reuse.



### General Plan Land Use Designations

The existing land uses of NFD Point Molate are described in Section 3.1.1. The General Plan Land Use Map has the following land use designations for NFD Point Molate:

- Port/Marine Terminal/Ship Repair
- Recreation Lands/Subcategory Community Open Space
- Other Types of Open Space

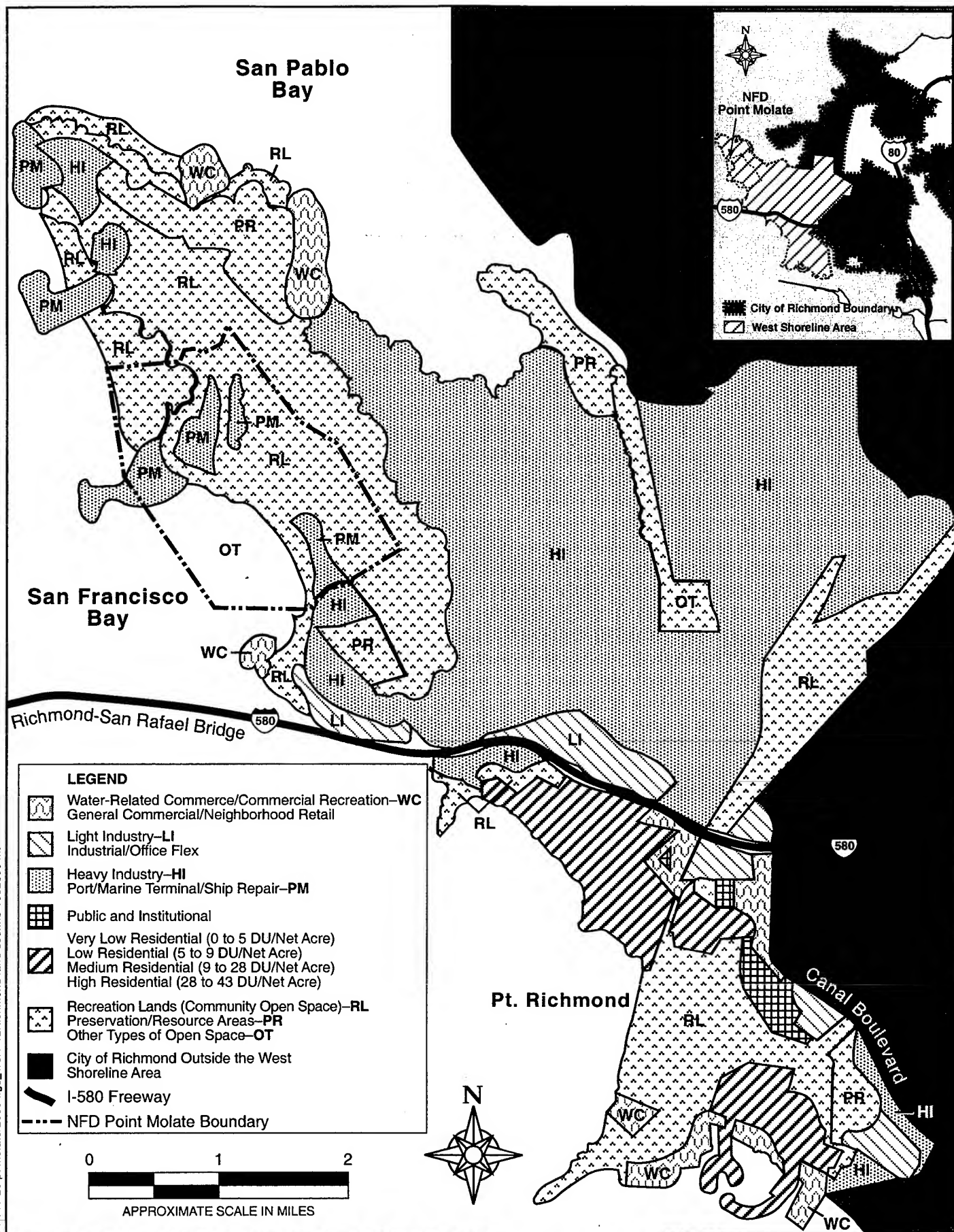
After conveyance of the property out of Federal ownership, the General Plan land use designations could apply to the property, or the City could identify new designations, which would require modifications to the General Plan and Zoning Ordinance. The City has not stated that a General Plan Amendment will be done prior to conveyance of the property. However, an amendment would be necessary prior to approval of any discretionary permits intended to implement the community reuse plan.

According to the current land use designations for NFD Point Molate, the "Port/Marine Terminal/Ship Repair" General Plan designation would include the northern part of the property associated with military operations, such as the pier, pier laydown area, sewage treatment area, administration and operations buildings, and the residential area. In addition, the laydown area at the south end of the property also would have this designation. The Bay waters of NFD Point Molate would be designated "Other Types of Open Space," and the remainder of the property would be "Recreation Lands" (Figure 3.1-12). Below are descriptions of these land use designations from the General Plan (City of Richmond 1994a).

**Port/Marine Terminal/Ship Repair.** "The Port of Richmond is a valuable component of the City's economic base whose long term viability needs to be sustained. Use of land within this district should therefore be reserved for a wide range of municipal or private maritime, marine terminals, cargo handling, ancillary manufacturing or related establishments that are dependent on direct port access for the import or export of raw materials or finished products...In addition to marine terminals, cargo handling...and ancillary manufacturing and office uses, the following types of uses which extensively use rail or transport facilities, and other ancillary uses allowed within port priority use areas...Uses not requiring a proximity to the port should be located elsewhere in the city, in an otherwise appropriate district."

**Recreation Lands/Subcategory Community Open Space.** Under the "Recreation Lands" land use designation there are five subcategories. The subcategory that would apply to NFD Point Molate is "Community Open Space": "This category generally includes easements, steep hillsides, land use buffers, storage tank farms that serve adjacent industrial uses, and common residential open space areas. It can also include other





Source: City of Richmond 1994a (Land Use Map Amended November 1996)

**Figure 3.1-12: City of Richmond Land Use Designations (Upon Disposal)**



open space areas which provide outstanding scenic, historic or cultural values. These areas are not inconsistent with other recreation lands."

**Other Types of Open Space.** For water: "This designation is applied to waters of San Francisco and San Pablo Bay and associated channels and harbors. ...Uses generally found within these areas include transport facilities associated with ferry terminals and adjacent heavy industrial plants such as ports and wharves; and water-oriented recreation uses such as boating and fishing. The construction of new residences or commercial uses and the subdivision of land is inconsistent with this designation."

**Recreation Lands.** To the north and east of NFD Point Molate, the refinery lands are designated "Recreation Lands": "Open space for outdoor recreation includes areas of outstanding scenic, historic and cultural value; it also includes areas particularly suited for park and recreation purposes, including access to the shoreline, creeks, and areas which serve as links between major recreation and open-space reservations, including utility easements, banks of creeks, trails, and scenic highway corridors."

#### **Surrounding Land Use Designations**

As described in Section 3.1.2, much of NFD Point Molate is surrounded by Chevron property. The General Plan Land Use Map designates the refinery lands to the north and east of NFD Point Molate "Recreation Lands," subcategory "Community Open Space." Refinery lands adjacent to the south end of NFD Point Molate are designated "Heavy Industry" and "Recreation Lands," subcategory "Community Open Space."

Other land use designations on the west side of the San Pablo Peninsula include Port/Marine Terminal/Ship Repair and Heavy Industry associated with the Port of Richmond's Terminal No. 4. The Preservation/Resource Area designation applies to the quarry, and Water-Related Commerce/Commercial Recreation applies to the Red Rock Cove property. The Caltrans area and other undeveloped land near the Richmond-San Rafael Bridge is designated Light Industry (Figure 3.1-12). Land use designations not described above are described below (City of Richmond 1994a).

**Heavy Industry.** "This category accommodates a wide variety of industrial uses including, but not limited to, oil refining, contractors' storage yards, warehouses, machine shops, co-generation plants, and other "heavy" industrial type uses. The industrial activities are traditionally large scale and include very little or no office space. Most patently obnoxious uses are in this category and require conditional use permits."

**Preservation/Resource Areas.** "These areas are designated to protect natural resources including the preservation of plant and animal life, habitat for fish and wildlife species; areas required for ecologic and other scientific study purposes, creeks, bays, marshes and estuaries; watershed lands; areas used for the managed production of resources

including rangelands, agricultural lands, lands required for the recharge of ground water basins, and areas containing major mineral deposits."

**Water-Related Commerce/Commercial Recreation.** "Usually found only where there is good access both by land and water, these specialized uses capitalize on their shoreline locations to serve other water oriented uses, most often marinas...Typical uses include boat sales, rentals, and repairs, sail makers and chandleries, restaurants and fish markets, and boat club facilities. Residential uses may also be found within these areas."

**Light Industry.** "...the uses within this category include warehousing, distribution centers, commercial nurseries, and related establishments which have limited external impact on the surrounding area. It is assumed these uses are located within open and attractive settings where development is carefully controlled to ensure compatibility between the industrial operations and other activities in the area. Where light industrial uses are adjacent to residential neighborhoods, particular care should be given to 'buffer' the uses. The sites may have warehouse-like buildings with less than 10% office space. Support retail/services uses may be found within this category."

The nearest residential and general commercial uses are about 2 miles (3.3 km) south of NFD Point Molate in the Point Richmond neighborhood of Richmond.

#### **General Plan Land Use Policies**

Land use policies from the Land Use Element of the General Plan, including policies specific to the West Shoreline Planning Area Guidelines relevant to proposed reuse of NFD Point Molate, are listed below.

- Require new development adjacent to historical sites to incorporate design elements to complement the character of the surrounding historical structures (Policy LU-A.4).
- Encourage commercial and industrial facilities to enhance and complement the surrounding areas (Policy LU-B.1).
- Accommodate heavy industrial uses in large areas buffered from major arterials and adjacent uses (Policy LU-B.2).
- Require sufficient visual open space and/or landscaped screening between industrial operations and adjacent residential or recreational activities in order to create adequate buffers (Policy LU-B.5).
- Urge an inclusion of a broad variety of dwelling types within all new and existing residential communities (Policy LU-C.2).

- Ensure that new industrial developments do not detract from the aesthetics of an area (Policy LU-C.3).
- Give high priority to preserving and enhancing the potential amenities of the shoreline's variety of edges and the landmark character of the regional landscape (Policy LU-E.1).
- Require new development to preserve the unique view opportunities of the shoreline and ridgelines in order to maximize their availability to the public (Policy LU-E.2).
- Form community boundaries by (1) open space, (2) the edge between residential and non-residential uses, (3) topographic features, and/or (4) linear elements such as freeways, major thoroughfares or rail lines (Policy LU-H.1).
- Encourage mixed-use developments, where allowed, to create both day and night activities (Policy LU-J.1).
- Encourage the conversion of long-term vacant commercial and light industrial space into live/work spaces (Policy LU-J.2).
- Reserve waterfront sites for those commercial and commercial recreation uses that clearly benefit from location on the shoreline and proximity to public recreation facilities and public access areas (Policy LU-L.5).
- Promote commercial and industrial development that creates maximum job opportunities for area residents (Policies LU-N.1 and LU-P.1).
- Use established standards to limit industrial activities that may be objectionable due to odors, noise, fumes, or other emissions (Policy LU-O.5).
- Avoid land uses that place residential dwellings with "heavy" industrial and maritime uses (Policy LU-O.7).

#### **West Shoreline Planning Area Guidelines**

- Reserve shoreline sites for those commercial and commercial recreation uses that clearly benefit from location on the shoreline and proximity to public recreation facilities and public access areas (Guideline #4).
- Encourage the acquisition of historic buildings at Winehaven by the East Bay Regional Park District or the City (Guideline #6).
- Promote commerce and commercial recreation at Winehaven when the site is available, but after public recreation and scenic roads along the shoreline north of the toll plaza are developed (Guideline #7).
- Designate a site for a marina at NFD Point Molate when land there is available (Guideline #8).

- Give priority to preserving and enhancing the potential amenities of the shoreline's variety of edges and of the landmark character of its adjacent hills (Guideline #9).

#### City of Richmond Zoning Ordinance

Figure 3.1-13 depicts the zoning designations, and Table 3.1-2 summarizes the general characteristics of the zoning districts in the West Shoreline Planning Area. After transfer of the property out of Federal ownership, the City's zoning designations would apply to NFD Point Molate.

The zoning designations that would be applicable to NFD Point Molate are Marine Industrial and Community and Regional Recreation (City of Richmond 1997b).

**Marine Industrial.** This designation would apply to the pier head area west of Western Drive in the northern part of the property and the laydown area in the southern part

(Figure 3.1-13). The Zoning Ordinance describes this zone as "...intended to create, preserve, and enhance areas containing a wide range of municipal or private maritime uses such as marine terminals, cargo handling, ancillary manufacturing uses that are dependent on direct port access for import and export of raw materials and finished products are also found in the district...Adjacent zoning districts should provide buffering between residential districts and the M-4 [Marine Industrial] district."

**Community and Regional Recreation District.** This designation would apply to the remainder of the property and is described in the Zoning Ordinance as "...intended to create, preserve and enhance local, neighborhood, community and regional areas of outstanding scenic, historic and cultural values including parks and related facilities such as swimming pools, playing fields, recreational buildings, trails, and associated parking. The CRR [Community and Regional Recreation] district consists of predominantly open space land uses which, in the public interest, should retain this character."

#### Surrounding Zoning Designations

The Chevron land immediately adjacent to the northeast, east, and southeast of NFD Point Molate is zoned CRR, beyond which it is zoned Heavy Industrial, except for the lands to the northwest of NFD Point Molate, which are zoned Marine Industrial (Figure 3.1-13).

Zoning designations for other uses on the west side of the San Pablo Peninsula include Marine Industrial and Heavy Industrial for the Port of Richmond Terminal No. 4 area, Community and Regional Recreation for the Red Rock Cove property, and Light Industry for the Caltrans area and other undeveloped land near the Richmond-San

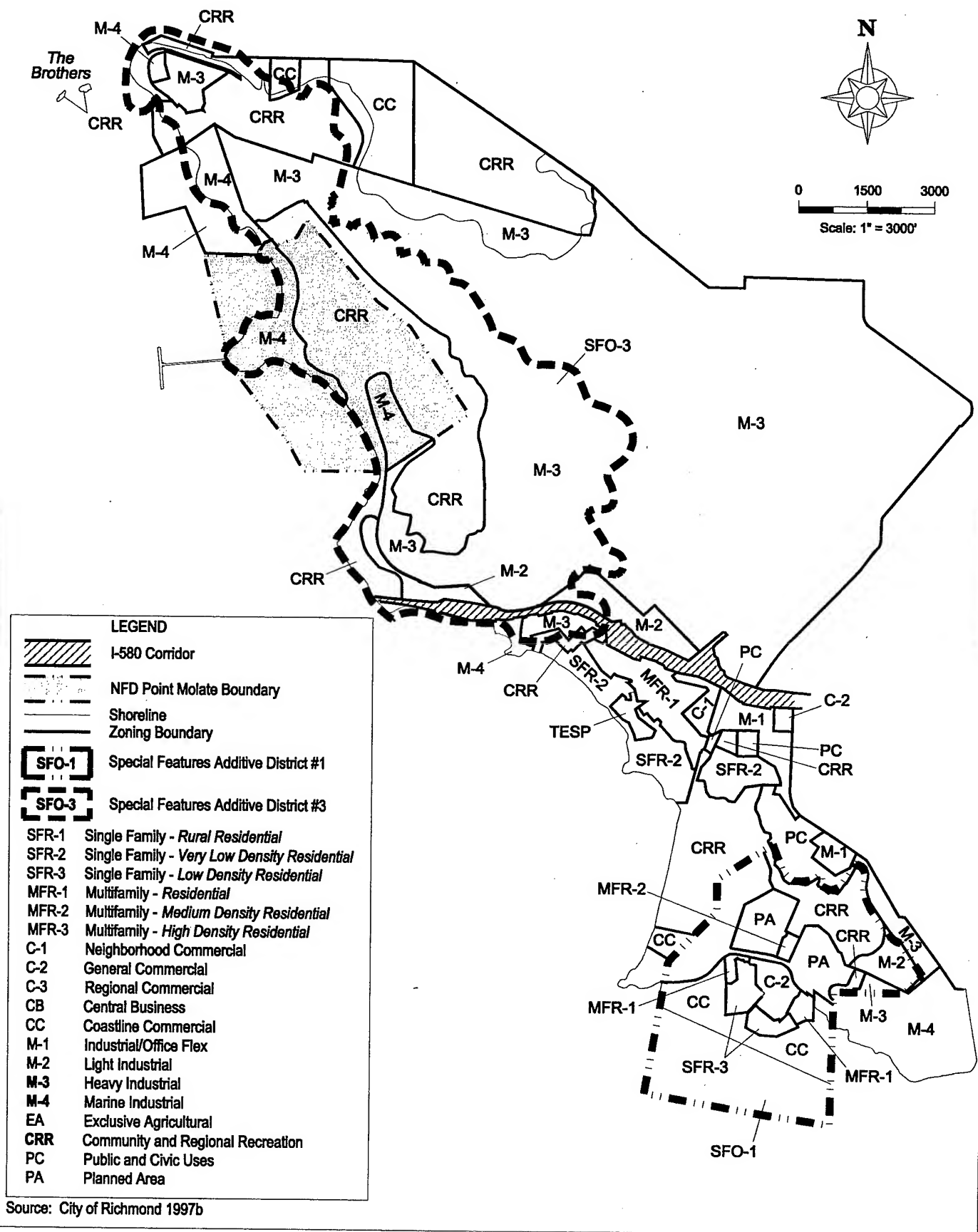


Figure 3.1-13: West Shoreline Zoning Designations

TABLE 3.1-2

## ZONING DISTRICTS IN THE WEST SHORELINE AREA

ZONING DISTRICT	PERMITTED USES
<b>Residential Districts</b>	
SFR- 1: Single-Family Rural	One dwelling unit per 11,000 square feet or more.
SFR-2: Single-Family Very Low Density	One dwelling unit per 6,000 square feet or more.
SFR-3: Single-Family Low Density	One to two dwellings per 7,500 square feet or more.
MFR-1: Multifamily Residential	Apartments, townhouses, duplexes at medium density.
MFR-2: Multifamily Medium Density	Apartment living areas with access to transportation, shopping and community centers.
MFR-3: Multifamily High Density	High rise apartment living with access to transportation, shopping and community centers.
<b>Commercial Districts</b>	
C-1: Neighborhood Commercial	Small-scale retail serving immediate neighborhood.
C-2: General Commercial	Variety of office, consumer and business services.
C-3: Regional Commercial	Wide range of retail and wholesale establishments serving both long- and short-term needs.
C-B: Central Business	High intensity multiple uses with an urban character.
CC: Coastline Commercial	Selective range of retail establishments serving water-oriented uses.
<b>Industrial Districts</b>	
M-1: Industrial/Office Flex	Establishments primarily engaged in research, product development, testing and administration, production of high technology electronics, industrial or scientific products, or commodities.
M-2: Light Industrial	Manufacturing, warehousing, trucking, and distribution oriented uses with limited external impact on the surrounding area.
M-3: Heavy Industrial	Manufacturing and related establishments that are potentially incompatible with most other establishments.
M-4: Marine Industrial	Municipal or private maritime uses (terminals, cargo handling, ancillary manufacturing) in areas having extensive rail or transport facilities.
<b>Open Space/Recreation Districts</b>	
EA: Exclusive Agricultural	Areas capable of and generally used for livestock and/or the production of food.
CRR: Community and Regional Recreation	Neighborhood, community and regional areas of outstanding scenic, historic, and cultural values, including parks and related facilities.
PC: Public and Civic Uses	Public and semi-public and educational uses such as private offices, libraries, schools, colleges, hospitals, clubs and halls.
<b>Overlay Districts</b>	
RMO: Resource Management	Physical restraint areas where additional controls to supplement or to modify those of the base district are required.
SFO: Special Features	Specific areas where additional controls to supplement or modify those contained in the base district are required.

542 Source: City of Richmond 1997b.

Rafael Bridge (Figure 3.1-13). Zoning designations that were not described previously are described below (City of Richmond 1997b).

**Heavy Industrial.** "...is intended to create, preserve, and enhance areas containing a wide variety of industrial uses...which are potentially incompatible with most other establishments, and is generally found in areas which are distant from residential areas and which provide a wide variety of sites with good rail and highway access..."

**Light Industrial.** "...is intended to create, preserve and enhance areas containing manufacturing, warehousing, trucking and distribution oriented uses, and related establishments with limited external impact on the surrounding area within an open and attractive setting. On-site administrative offices or company headquarters and support retail services may be found in this district..."

The nearest areas zoned for residential and general commercial uses are about 2 miles (3.3 km) south of NFD Point Molate across I-580 in the Point Richmond neighborhood of the City of Richmond.

Most of the San Pablo Peninsula north of Point Richmond, including NFD Point Molate, lies within the Special Features Overlay District, Additive District #3 (Figure 3.1-13). This overlay zoning district preserves ridgelines, hillsides, ridge slopes, and visual resources by placing additional controls on the base zoning districts. Controls could include building height, bulk, siting and coverage; open space and landscaping; excavation, grading and filling; and related development controls.

## 3.2 VISUAL RESOURCES

This section describes visual resources in the ROI of NFD Point Molate. The ROI for visual resources is the NFD Point Molate property and public areas from which it can be seen. Photographs referred to in this section can be found in Appendix E.

### 3.2.1 Visual Character of NFD Point Molate

NFD Point Molate is a military industrial property located on the Bay side of San Pablo Peninsula in the western portion of the City (Figure 3.2-1). The property is a 413-acre (167-ha) parcel that includes approximately 100 acres (40 ha) of submerged lands in the Bay. The property is longer than it is wide, with the eastern boundary formed by Potrero Ridge. The property's western boundary roughly parallels the eastern boundary, extending into the Bay to encompass the Point. The NFD Point Molate pier extends from the Point approximately half a mile (0.8 km) out into the Bay, beyond the western site boundary. The northern property boundary is about one-half mile (0.8 km) north of the Point, and the southern boundary is approximately one mile (1.6 km) south. Surface elevations on the property range from 440 feet (134 m) at the eastern property boundary, on top of Potrero Ridge, to sea level at the western boundary in the Bay.

Potrero Ridge forms a topographical barrier separating the NFD Point Molate property from most of the surrounding area, including Chevron's refinery facilities located to the east. A series of steep knolls with slopes greater than 15 percent descend from Potrero Ridge towards the Bay. The knoll that ends at the Point divides the property into northern and southern areas (Figure 3.2-1).

Western Drive runs the full length of the property. Entering NFD Point Molate from the south, Western Drive descends into the southern area, crossing about 1 mile (1.6 km) of gently rolling terrain. Steep slopes of the Potrero Ridge line lie to the east, and the flat shoreline of the Bay lies to the west. About a mile (1.6 km) into the property, Western Drive turns inland, climbing up over the knoll that divides the northern from the southern area. Descending into the northern area, Western Drive traverses rolling terrain for about half a mile (0.8 km) as it heads northwest beyond the property.

#### *Northern NFD Point Molate Visual Character*

Most of the existing development on the NFD Point Molate property is concentrated north of the Point (Figure 3.2-2 and Appendix E, Figure E.1-1 and Photographs E.1-2 to E.1-9). Near the shoreline, west of Western Drive, this area has an industrial character. The ground is fairly flat. Industrial buildings, pipelines, small wastewater treatment ponds, paved areas, and abandoned rail lines occupy the area. There are historic



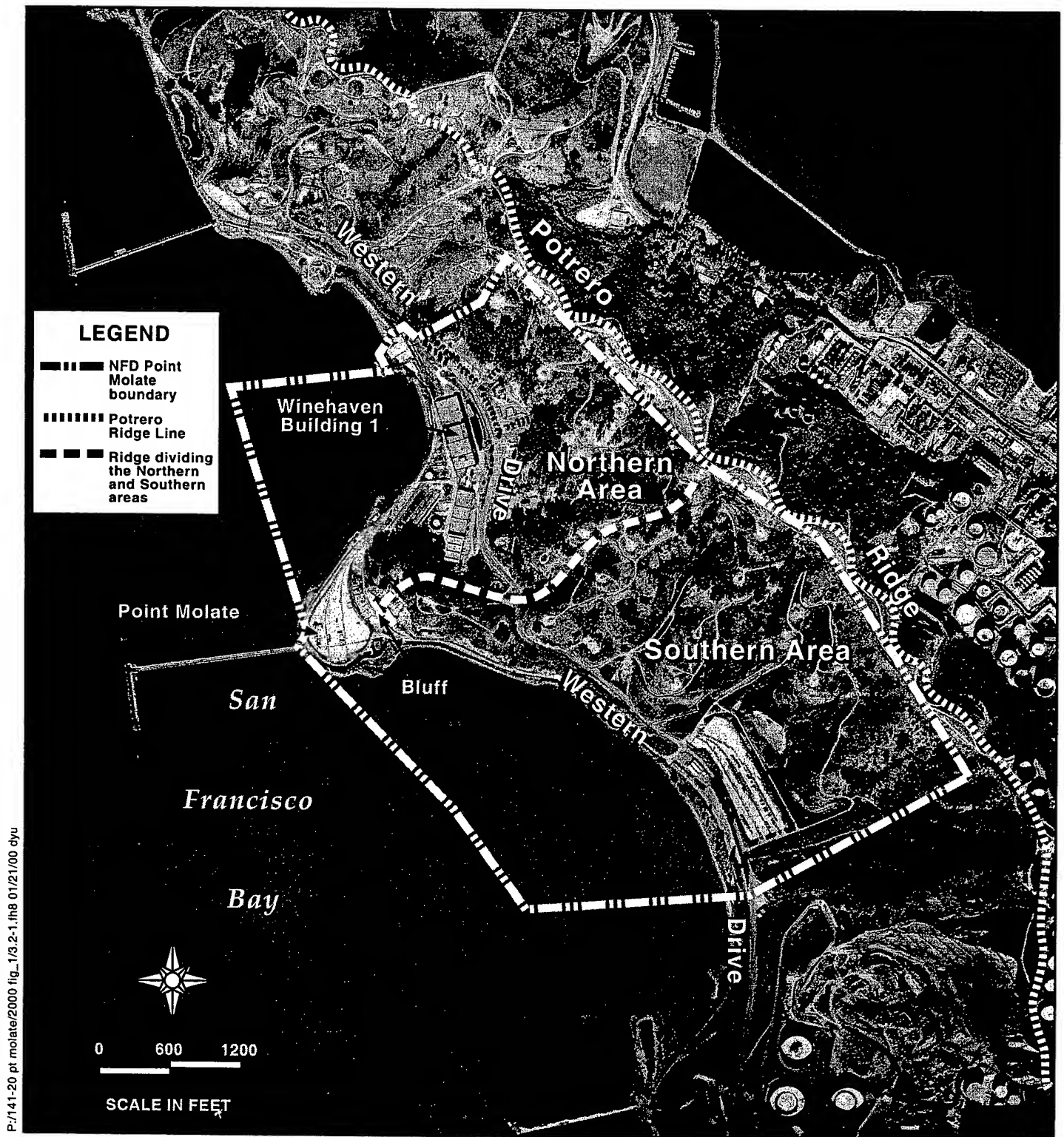


Figure 3.2-1: Visual Character of the NFD Point Molate Property

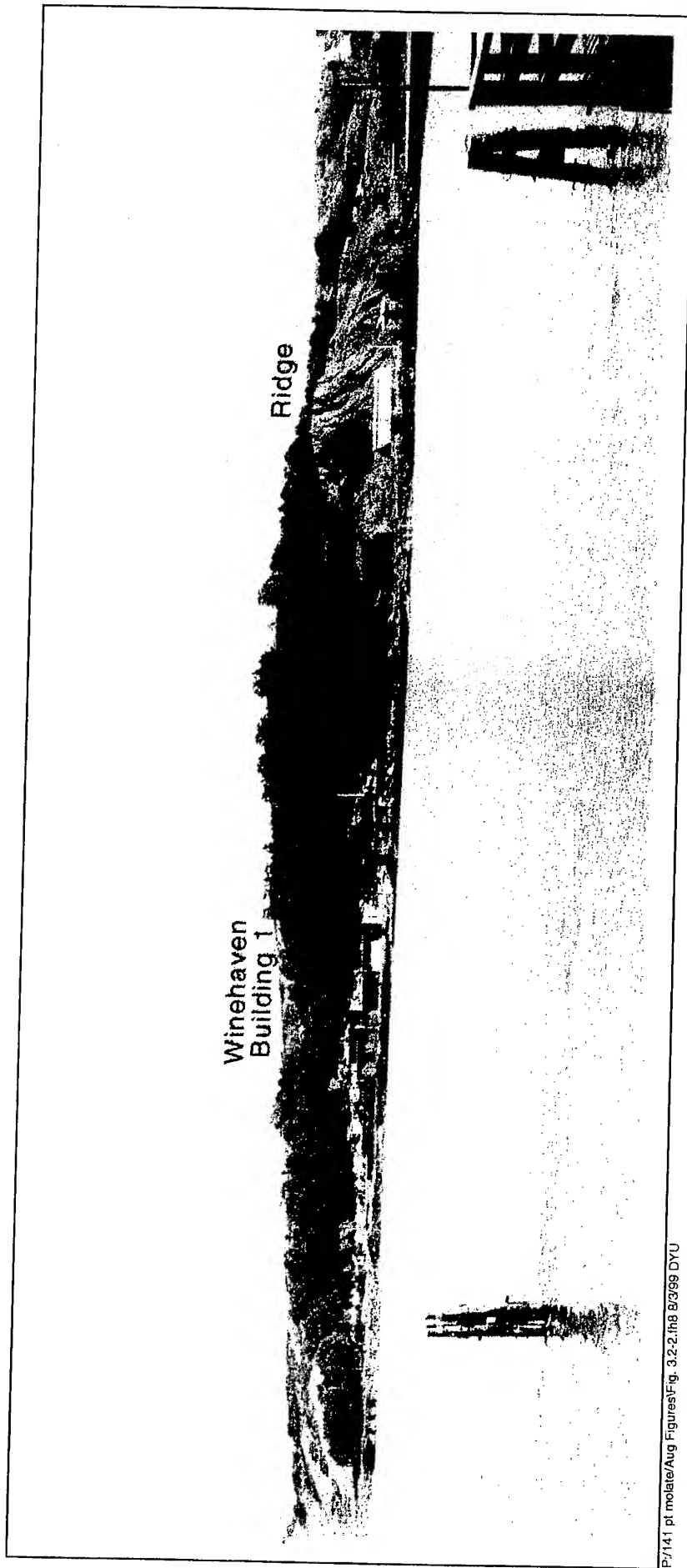


Figure 3.2-2: Looking Northeast at Northern Area from the End of the NFD Point Molate Pier

buildings, some with architectural interest. At the Point there is an exposed cliff, below which is a flat open expanse of bare earth. A concrete fuel pier with pipelines extends into the Bay.

Across Western Drive to the east is an administrative building, maintenance yard, and firehouse. Further north, on the east side of Western Drive, the site has a residential character. A group of light-colored cottages lines the east side of Western Drive, with others on the hillside behind it. There are front and back yards, a central garage area, and two open play areas. Behind the cottages, a eucalyptus grove covers the north-facing hillsides. Narrow roadways traverse the hillsides, providing access to USTs formerly used to store fuel.

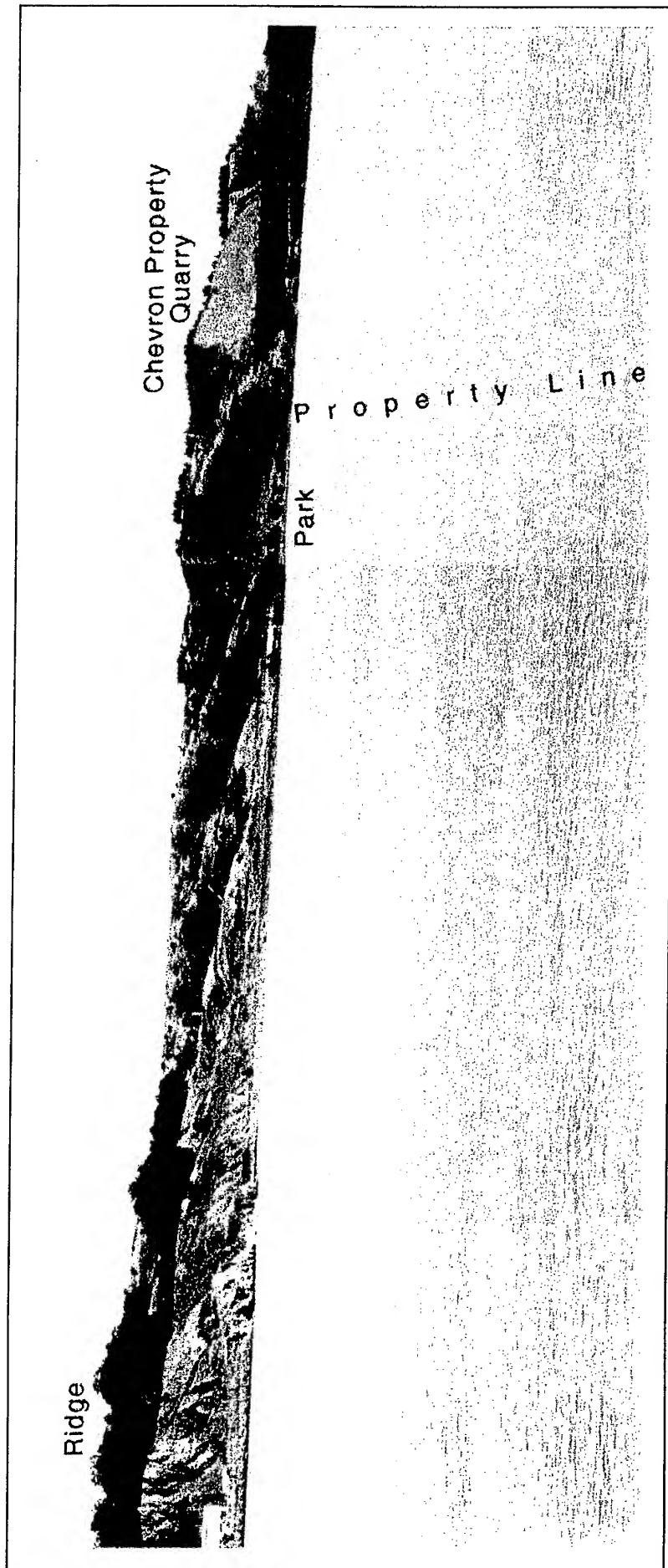
### *Southern NFD Point Molate Visual Character*

The area south of the Point appears as open space. USTs are buried throughout the steep hillside but are not visible at the surface (Figure 3.2-3). Portions of roadways and white pipelines that connect to the USTs are visible on the hillside. The open hillsides are covered with low-lying vegetation. An abandoned rail line borders the shoreline, crosses to the east side of Western Drive, and separates into several spur lines in a large, flat, paved area at the southern end of the property. Across Western Drive is Point Molate Beach Park (Appendix E and Figure E.1-2, Photograph E.1-13). The park has a parking area, children's play structure, paths, and landscaping along the shoreline. Next to the park are two quonset huts.

In the southern portion of the NFD Point Molate property, one of the UST access roads, Ridge Road, traverses the upper slopes of Potrero Ridge. At one location along this road (Appendix E, Figure E.1-1 and Photograph E.1-11), views over the ridge to the southeast include southwest Richmond, the East Bay hills, and the tank farms of the Chevron Refinery.

### **3.2.2 NFD Point Molate Viewshed**

NFD Point Molate is visible by the public from near-, middle-, and distant-range viewing locations that are either in or near the Bay (Figure 3.2-4). Near-range public viewing locations (within 1 mile [1.6 km]) are Western Drive, the Richmond-San Rafael Bridge, and the Bay, including the Brothers Islands. Middle-range public viewing locations (between 1 and 3 miles [1.6 and 4.8 km]) are limited to locations in San Francisco Bay, including the Richmond-San Rafael Bridge, Red Rock Island, and the East and West Marin Islands. Distant-range public viewing locations (more than 3 miles [4.8 km]) include portions of northern Marin County's eastern shoreline and east-facing hills.



P:/141-20 pt molate/Aug Figures/Fig 3.2-3.1.h8 8/3/99 DYU

Figure 3.2-3: Looking East at Southern Area from the End of the NFD Point Molate Pier

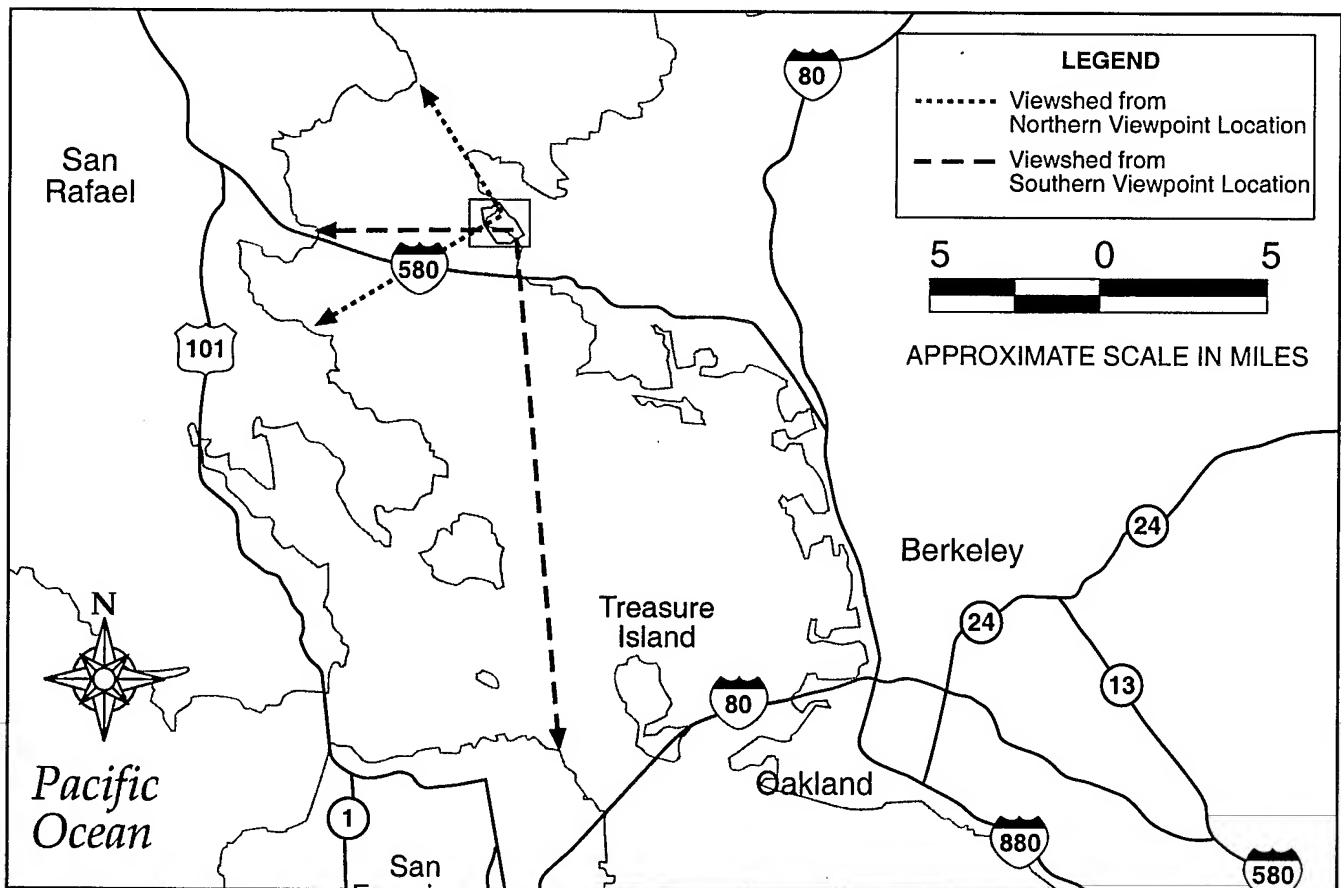
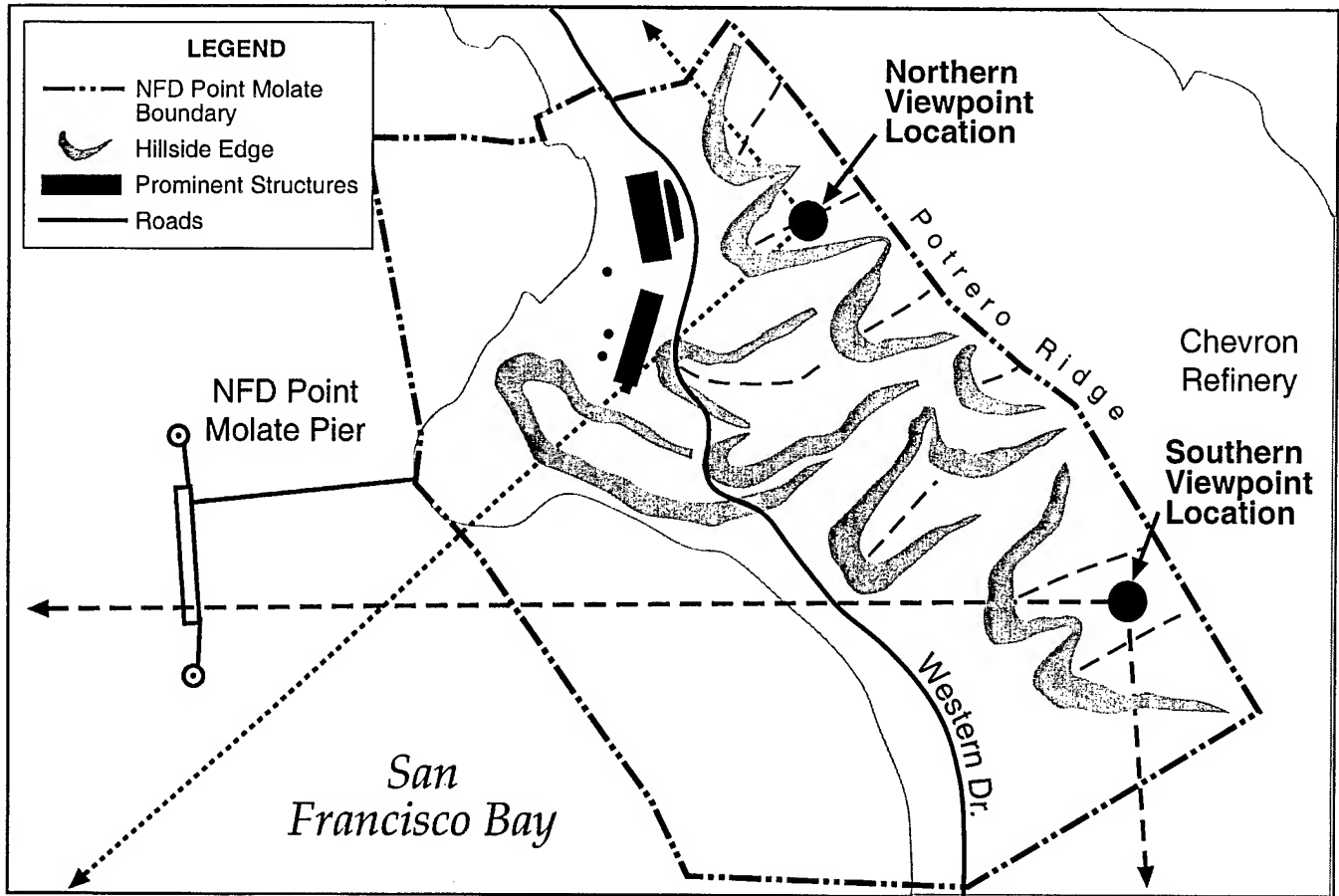


Figure 3.2-4: Representative Viewsheds from Two Locations at NFD Point Molate

### *Northern NFD Point Molate Viewshed*

The northern area of the NFD Point Molate property is visible by the public from the on-site viewing location of Western Drive and from off-site locations to the north and west. Off-site locations include the Bay, Richmond-San Rafael Bridge, and shoreline and hillside areas north of the bridge. Appendix E, Figure E.1-2 and Photographs E.1-14 and E.1-15, shows the views from locations in the northern area.

From the on-site public viewing location of Western Drive, there are near-range views of Building 6 and the Winehaven Building, with middle-range views of the Bay and distant-range views of the Marin skyline, including Mount Tamalpais. Street plantings of Monterey pines provide partial screening of these views. To the east of Western Drive, near views are confined to an administration building (Building 123), firehouse, and cottages, behind which is a steep forested hillside.

The northern area is visible from near-range public viewing locations in the Bay. The northern area appears as an enclave of development nestled in a small cove, backdropped by forested hillside. The Winehaven Building is the largest and most distinctive building (three stories) and blends into the landscape because of its earthen-colored brick. Other smaller, lighter-colored buildings and appurtenant structures near the shoreline contrast with the surrounding landscape. They are not visually obtrusive because of their small scale relative to the surrounding landscape.

Views of the northern area from middle- and distant-range locations include the Bay, Richmond-San Rafael Bridge, and northern Marin's eastern shoreline and hills. From these locations, views of the northern area are dominated by the surrounding landscape. The site is seen as part of the larger landscape of San Pablo Peninsula. In this context, this area is not readily noticeable due to the small scale and density of development, as well as its concentration in relatively flat areas, low on the slope and near the shoreline.

Views of the northern area from the Richmond-San Rafael Bridge are limited. For most westbound traffic, views are not available until mid-span (middle-distance), and they are blocked by guardrails on the bridge for most vehicles, except high-clearance ones. Views are to the north and east. For eastbound traffic, parts of the northern area can be seen from the western end of the bridge, although these views are also partially screened by guardrails.

### *Southern NFD Point Molate Viewshed*

The southern area of the NFD Point Molate property is visible by the public from the on-site viewing locations of Western Drive and from off-site locations to the west and south. Off-site locations include the Bay, Richmond-San Rafael Bridge, and southern

Marin County's eastern shoreline and hills. Appendix E, Figure E.1-2 and Photograph E.1-16, shows the view from locations in the southern area.

Looking west on Western Drive, there are near-range open views of the NFD Point Molate shoreline, including the parking and landscaped areas of Point Molate Beach Park (Appendix E, Figure E.1-2 and Photograph E.1-13). To the east of Western Drive, there are near-range views of open hillsides, with intermittent views of pipelines and hillside roads. The southern area of the site is oriented towards the Richmond-San Rafael Bridge and therefore is more visible from it than is the northern area. For both eastbound and westbound traffic, there are intermittent views partially screened by guardrails (depending on the type of vehicle).

Views of the southern area from middle- and distant-range locations include the Bay, Richmond-San Rafael Bridge, and southern Marin's eastern shoreline and hills. From these locations, the two Quonset huts are the only structures visible on this part of the site. The southern area blends into the surrounding visual open space of the San Pablo Peninsula.

### **3.2.3 Plans and Policies**

The plans and policies discussed below are relevant to the disposal and reuse of the NFD Point Molate property.

#### ***Regional***

##### ***BCDC San Francisco Bay Plan***

The following *Bay Plan* policies concern the appearance, design, and scenic views of development around the Bay:

- To enhance the visual quality of development around the Bay and to take maximum advantage of the attractive setting it provides, the shores of the Bay should be developed in accordance with the Public Access Design Guidelines (Policy 1).
- All Bay front development should be designed to enhance the pleasure of the user or viewer of the Bay. Maximum efforts should be made to provide, enhance, or preserve views of the Bay and shoreline, especially from public areas, from the Bay itself, and from the opposite shore. To this end, planning of waterfront development should include participation by professionals who are knowledgeable of the Commission's [BCDC] concerns, such as landscape architects, urban designers, or architects, working in conjunction with engineers and professionals in other fields (Policy 2).
- Structures and facilities that do not take advantage of or visually complement the Bay should be located and designed so as not to impact visually on the Bay and

shoreline. However, some small parking areas for fishing access and Bay viewing may be allowed in exposed locations (Policy 4).

- Shoreline developments should be built in clusters, leaving open area around them to permit more frequent views of the Bay (Policy 8).
- In order to achieve a high level of design quality, the Commission's Design Review Board, composed of design and planning professionals, should review, evaluate, and advise the Commission on the proposed design of developments that affect the appearance of the Bay in accordance with Bay Plan findings and policies on Public Access; on Appearance, Design, and Scenic Views; and the Public Access Design Guidelines. City, county, regional, state, and Federal agencies should be guided in their evaluation of Bay front projects by the above guidelines (Policy 12).
- Views of the Bay from vista points and from roads should be maintained by appropriate arrangement and heights of developments and landscaping between the view areas and the water (Policy 14).

#### **Local**

##### **City of Richmond General Plan**

The technical appendices of the General Plan (City of Richmond 1994b) provide policy direction for visual resources in the vicinity of NFD Point Molate. Policies from the Open Space and Conservation Element are summarized below.

- Discourage filling, dredging and/or development that would have a significant adverse impact on the aesthetic character of the physical features of the area (Policy OSC-B.1).
- Require mitigation measures to avoid detrimental impacts of development on the aesthetic character of the physical features of the area (Policy OSC-B.2).
- Protect the predominantly natural character of the hills and ridges by regulating height, color, material and siting of structures, amounts of cut and fill, placement of utility crossings, and removal of vegetation (Policy OSC-F.1).
- View corridors of the Bay, the hills, and other features should be protected through controls on the siting and height of buildings (Policy OSC-G.3).

The General Plan, Technical Appendix F, identifies scenic routes, corridors, and landscaped freeways within the City. Scenic routes are most major and some secondary thoroughfares. According to the General Plan, these routes might not afford traditional scenic vistas but are important visual elements to be developed and enhanced. Some serve as gateways to communities and jurisdictions within the City, making their appearance a significant contributor to residents' and visitors' feelings about the quality of the urban environment. There are two designated scenic routes in the ROI:



- 189       • Western Drive  
190       • I-580 (Richmond–San Rafael Bridge)

191       Scenic corridors are largely undeveloped areas or developed areas where open space  
192       and major ridge lines dominate the scenic quality adjacent to and visible from  
193       designated scenic routes. The western portion of San Pablo Peninsula adjacent to  
194       Western Drive is the only designated scenic corridor in the ROI.

195       Scenic and landscaped freeways are freeways designated as scenic routes that are  
196       landscaped. I-580 is a designated scenic and landscaped freeway; however, the portion  
197       of I-580 visible from NFD Point Molate is the Richmond–San Rafael Bridge, which is not  
198       landscaped.

### 3.3 SOCIOECONOMICS

This section describes the regional socioeconomics setting, including population, employment and income, housing, and schools. The ROI for population, employment and income, and housing is the City and Contra Costa County. For schools, the ROI is the West Contra Costa Unified School District (WCCUSD). These areas were selected because it is expected that most future workers at the project site would reside within this area and that students associated with the housing units proposed for Alternative 1 would be enrolled in the local school district.

#### 3.3.1 Population

The NFD Point Molate property is currently in caretaker status and has no residents. At full operation, the facility had a total resident population of approximately 90 people. This included the base commander and military personnel on two-year assignments to NFD Point Molate, as well as their families.

The City's population as of January 1999 was 93,800 (California Department of Finance 2000). This is an increase of about nine percent from 1990. The City is projected to add 5,510 households between 2000 and 2020 (ABAG 1997).

Contra Costa County's population as of January 1999 was 916,400 (California Department of Finance 2000). This is an increase of 14 percent from 1990. Contra Costa County is expected to reach a population of 1,188,300 by the year 2020 (ABAG 1997).

Census information regarding the racial characteristics of the ROI and San Francisco Bay Area populations is given in Table 3.3-1.

**TABLE 3.3-1**  
**1990 RACIAL COMPOSITION OF THE ROI AND SAN FRANCISCO**  
**BAY AREA POPULATION**

RACE	CITY OF RICHMOND		CONTRA COSTA COUNTY		SAN FRANCISCO BAY AREA	
	NO.	%	NO.	%	NO.	%
African-American	37,461	42.8	72,886	9.1	533,188	7.7
Caucasian	26,757	30.7	560,852	69.7	4,147,971	59.9
Asian/Pacific Islander	9,870	11.3	73,909	9.2	919,279	13.3
Hispanic	12,690	14.5	90,266	11.2	899,243	13.0
American Indian	437	0.5	4,522	0.6	39,035	0.6
Other	210	0.2	1,297	0.2	384,104	5.5
<b>Total</b>	<b>87,425</b>	<b>100</b>	<b>803,732</b>	<b>100</b>	<b>6,922,820</b>	<b>100</b>

Source: U.S. Census 1990.

**3.3.2 Employment and Income**

A total of 86 permanent (resident) and 17 transient (non-resident) Navy were employed at the facility at full operation.

There are over 30,000 jobs in the City (ABAG 1997). ABAG '98 projected that the City's economy would grow 19 percent between 1995 and the year 2000. Employment in Contra Costa County was projected to increase by 12.5 percent over the same 5 years.

Unemployment rates in the City have declined from 12.2 percent in 1992 to 5 percent in 1999 (California Employment Development Department 2000), as compared with the 1992 and 1999 California state-wide averages of 9.3 percent and 5.2 percent, respectively (California Department of Finance 2000).

The 1995 Survey of Buyer Power (Sales Marketing and Management 1995) estimated the median household effective buying income, or net income, to be \$38,265 for the City, with 73 percent of all households realizing annual effective buying incomes of \$20,000 or more.

**3.3.3 Housing**

NFD Point Molate has 29 residential cottages. Twenty-eight of these are small (two-bedroom) houses, and one is somewhat larger (four bedrooms). The cottages are contributing elements to the Winehaven Historic District, which was placed on the NRHP in 1978. All of these residences are currently in caretaker status and are vacant.

The City had 35,861 housing units as of January 1998 (ABAG 2000). This represents a 3.5 percent overall increase in the City's housing stock since the 1990 census. Single-family detached homes were estimated to be 56 percent of total units.

Over 1,700 new homes were built in the City between 1991 and 1995. The City continues to produce a significant number of affordable housing units, balancing and complementing its market rate and above-moderate income developments, such as Marina Bay and El Sobrante developments (City of Richmond 1998a).

Contra Costa County had 349,912 housing units as of January 1999 (California Department of Finance 2000). Single-family detached homes were estimated to be 65 percent of the total units, 9 percent more than in the City.

**3.3.4 Schools**

The City's schools are within the WCCUSD, which comprises 39 elementary schools, 5 middle schools, 5 high schools, and 10 "miscellaneous schools," including adult education facilities and special high schools (WCCUSD 1999). The NFD Point Molate area is served by Washington Elementary School, Portola Middle School, and Kennedy

High School. Washington Elementary School is operating above capacity; Portola Middle School is operating at about 87 percent of capacity; and Kennedy High School is operating at about 79 percent of capacity (WCCUSD 1999). School capacities and 1998/1999 enrollment data are shown in Table 3.3-2.

**TABLE 3.3-2**  
**SCHOOL CAPACITIES AND ENROLLMENTS**

SCHOOL	CAPACITY	1998/1999 ENROLLMENT	AVAILABLE SPACE
Washington Elementary	348	371	(23)*
Portola Middle School	1,140	987	153
Kennedy High School	1,348	1,080	268

Source: WCCUSD 1999.

\*() indicates over-capacity.

If a school is over capacity, portable classrooms are used to accommodate the extra students. If classrooms are at capacity and only one or two students need to be accommodated, then a student might be assigned to another school. The District's preference and efforts are to accommodate students at their neighborhood schools. Parents may apply to another school in the District if that transfer would help improve ethnic diversity at that school.

WCCUSD schools are funded through property tax revenue, state general aid and school apportionments, and Federal subventions. The District also collects developer fees in a fund that can be used for constructing new schools or purchasing/leasing relocatable classrooms in accordance with SB 50, which is discussed below.

### 3.3.5 Plans and Policies

The plans and policies discussed below are relevant to the disposal and reuse of the NFD Point Molate property.

#### *State*

SB 50 provides a \$9.3 billion bond measure for state school construction and revises the existing limitation on developer fees for school facilities. This bill was enacted as urgency legislation and became a statute on November 4, 1998, as a result of the California voters approving a bond measure (Proposition 1A). SB 50 established the base amount of allowable developer fees (Level One fee) at \$1.93 per square foot for residential construction and prohibited school districts, cities, and counties from imposing school impact mitigation fees or other requirements in excess or in addition to those provided in the statute. The WCCUSD approved an increase in Level One fees to \$2.05 on April 5, 2000. The statute allows a school district to exceed the base Level One

fees and impose Level Two fees if the District prepares and adopts a five-year school facilities needs analysis and satisfies other criteria detailed in the statute. The Level Two fees may not exceed a level that would generate more than 50 percent of the project cost as defined by the statute. The WCCUSD prepared this needs assessment and approved Level Two fees of \$3.67 per square foot on January 5, 2000.

SB 50 also overturned a series of court decisions allowing cities and counties to deny or condition development approvals on grounds of inadequate school facilities when acting on a broad range of land use actions involving the planning, use, or development of real property.

The passage of SB 50 preempts the General Plan, Community Facilities Element, Policy CF-J, action statement #3, to "take steps to ensure that developers in each case coordinate and work closely with the School District on mitigating project impacts." This policy could have served as the basis for evaluating projects. SB 50 also prohibits local agencies, such as the City, from denying land use approvals on the basis that school facilities are inadequate.

#### **Local**

The Economic Development, Growth Management, and Housing Elements of the General Plan (City of Richmond 1994a) include numerous goals and policies relevant to socioeconomics. Relevant goals and policies are listed below:

- Maintain and increase the number of new permanent private-sector jobs available to City residents; encourage new jobs with increased pay scales; alleviate unemployment and underemployment of residents (Goal ED-A; Policy ED-A.1-8).
- Enlarge and diversify the City's revenue base; increase and accelerate new commercial development; upgrade existing industrial development (Goals ED-B, C, D, F, and accompanying policies).
- Make available a wide range of housing types (Goal ED-I and accompanying policies).
- Provide a reasonable opportunity for people to live and work within a defined area, which generally encompasses the City's sphere of influence (Goal GM-E; Policy GM-E.1-4).
- Make decent, safe, and affordable housing available to all existing and future Richmond residents; provide community facilities and open space, commercial services, and amenities easily accessible to all residential neighborhoods (Goals HG-A, D, and Policies HG-A.1-11, HG-B.1-8).

School goals and policies are addressed in the General Plan, Community Facility Element, as follows:

- 127
- 128
- 129
- 130
- 131
- 132
- Support the School District and other educational providers in providing high-quality educational opportunities for all segments of the population (Goal CF-J).
  - In the case of new residential developments having significant potential impacts on school district facilities, the City will take steps to ensure that developers coordinate and work closely with the School District on mitigating the project impacts (Goal CF-J, Action #3).

### 3.4 PUBLIC SERVICES

This section describes public services in the ROI of NFD Point Molate. The ROI for public services is the City, including the NFD Point Molate property. Public services include police and fire protection and emergency medical response services. The City currently provides limited public services to the property and would have complete jurisdiction of public services upon transfer out of Federal ownership.

#### 3.4.1 Police and Security Services

##### *On the NFD Point Molate Property*

Through a cooperative agreement with Navy, the City provides security and law enforcement services at the NFD Point Molate property.

##### *City of Richmond*

The Richmond Police Department's (RPD's) central station is at the Civic Center at 401 27th Street. There are five substations in the City. Two of the stations are about 3 miles (5 km) away: the nearest one is at 1131 Cutting Boulevard; the next closest substation is at 1000 Macdonald Avenue (City of Richmond 1998g).

The RPD is staffed with 186 sworn personnel. The City has ten beats, with one officer per beat on a 10-hour shift. The NFD Point Molate property is in the beat called Area 3, which covers the southwest part of the City (encompassed by Ohio Street, Point Richmond, Point Molate, west of Carlson Boulevard, and Point Isabel). This includes the neighborhoods of Santa Fe, Coronado, Cortez/Stege, the Southwest Annex, Point Richmond, Marina Bay, and parts of the Richmond Annex, as well as the NFD Point Molate property. The frequency of emergency calls to the project vicinity is low (City of Richmond 1998g).

Response time to the NFD Point Molate property depends on the magnitude of the emergency and the number of officers available. Calls are prioritized into five categories, with response times ranging from under five minutes (e.g., life-threatening calls, immediate apprehension of felony suspects, etc.) to an hour or more for low-priority calls (City of Richmond 1998g).

#### 3.4.2 Fire Protection and Emergency Medical Response Services

##### *On the NFD Point Molate Property*

Through a memorandum of agreement (MOA) with Navy, the City provides fire protection services and hazardous materials and emergency medical response services to the NFD Point Molate property. The NFD Point Molate property is designated as a "High Fire Hazard Severity Zone" (City of Richmond 1998e). Under the terms of the

MOA, the Navy makes available to the Richmond Fire Department (RFD) use of the fire station (Building 63), a Navy-owned fire truck, and fire suppression equipment.

For fire suppression, Chevron, through a mutual-aid agreement with the City, provides first-call response to the NFD Point Molate property from its fire station at 841 Chevron Way. Response time from Chevron to the top of the ridge-line is approximately six minutes. Chevron dispatches three personnel for calls at the NFD Point Molate property (City of Richmond 1998c). The City also has a mutual aid agreement with the City of El Cerrito for fire protection services.

For emergency medical response services, RFD has first-response duties. Mutual aid agreements with both Chevron and the City of El Cerrito Fire Department are also in effect for emergency medical services. If an injured person at the NFD Point Molate property needs transportation, an ambulance is dispatched.

#### *City of Richmond*

The RFD employs 103 fire suppression and emergency response personnel. A minimum of 25 personnel are on duty during an average shift, distributed among 7 stations and 8 engine companies throughout the City. The nearest RFD station is Station 61, at 140 West Richmond Avenue, approximately 2 miles (3 km) from the NFD Point Molate property. Station 61 is a single-engine station staffed by three personnel.

The City developed a contingency plan for the NFD Point Molate property that provides for both Chevron and RFD fire crews to be dispatched. RFD's response time goal for the NFD Point Molate property is six minutes. However, due to the distance between the fire station and the site, the effective response time is between eight and ten minutes (City of Richmond 1998f).

The RFD provides emergency medical response services for the City. All RFD personnel are trained as Emergency Medical Technicians and have Level II defibrillation certifications (City of Richmond 1998d).

#### **3.4.3 Plans and Policies**

The plans and policies discussed below are relevant to the disposal and reuse of the NFD Point Molate property.

#### *State*

Upon transfer of the NFD Point Molate property out of Federal ownership, RFD would be responsible for enforcing the laws and ordinances governing building design and equipment requirements for detecting, restraining, and extinguishing fires. These include California Code of Regulations (C.C.R.), Title 24; the Uniform Building Code (UBC); and the Uniform Fire Code.



**Local**

The Richmond General Plan sets forth Fire/Disaster/Emergency Services Coordination policies. The following are applicable at the NFD Point Molate property:

- Ensure that adequate fire equipment, fire breaks, facilities, water (with sufficient pressure and emergency backup systems), and access are provided for a quick and efficient response in any area designated in the Zoning Ordinance or in an environmental review document as having a fire hazard (Policy SF-B.1).
- Control erosion, minimize damage to the ridge's appearance, and restore wildlife habitat if a fire break proves necessary to protect the public from a serious fire hazard (Policy SF-B.3).
- Provide fire prevention facilities and equipment to protect the community (Policy SF-B.4).
- Provide an adequate level of police facilities and equipment to protect the community (Policy SF-E.1).
- Comply with and maintain compliance with performance standards for fire, police, parks, sanitary facilities, water, and flood control established in Richmond's Growth Management Element, and apply the standards to Richmond's development review process (Policy GM-B.1). These services standards are as follows:

**Fire**

- (1) First Engine Company: 6 minute response time
- (2) Water Requirements: 1,500 gallons (5,700 liters) per minute minimum
- (3) Access Widths: Turn-arounds and turning radius (inside must be 34 feet [10 meters])

**Police**

Capital facilities sufficient to maintain the following response times (for first unit):

- (1) Life Threatening service calls: 3–5 Minutes
- (2) Critical Emergency: 3–5 Minutes
- (3) Non-Critical Emergency: 15–20 Minutes
- (4) Non-Emergency: 30–60 Minutes
- (5) Other: 60 Minutes Plus

101        **Other Facilities**

102        The General Plan Community Facilities Element contains specific policies, as  
103        opposed to performance standards, that address the following additional facilities  
104        and services:

105        (1) Emergency/Disaster Management.

106        (4) Local Government Facilities.

107        (6) Other human services facilities (medical and social services, senior centers,  
108        libraries, and other service centers).

109        (8) Arts and Cultural Facilities.

- 110        • Ensure that the new development pays its share of the costs associated with the  
111        provision of facilities for fire, police, parks, sanitary facilities, water, and flood  
112        control, by attaching project-specific mitigation requirements as conditions of  
113        approval (Policy GM-B.2).

### 3.5 CULTURAL RESOURCES

The ROI for cultural resources is the area within the NFD Point Molate property boundary, because the proposed project alternatives would not affect cultural resources outside the boundary.

This section describes the archeological and historical background data pertinent to the disposal and reuse of the NFD Point Molate property. Historic properties include any object, site, district, area, building, structure, or place that is archeologically or historically important, or that exhibits traditional cultural value, such as properties sacred to Native Americans or other ethnic groups. Because of this broad definition, historic properties are referred to as cultural resources. The term also includes properties of architectural, scientific, engineering, economic, agricultural, educational, social, political, military, and cultural importance.

#### 3.5.1 Historical and Archeological Setting

Native Americans, known as Costanoans, inhabited the California coastal area from San Francisco Bay to Monterey Bay. They were hunters and gatherers. Numerous shell mounds and village sites existed along the San Pablo Peninsula, indicating a Native American presence starting before 2500 Before Common Era. Over the years, sites have been damaged or destroyed. However, buried intact remains of sites could exist on the NFD Point Molate property. See Appendix E, Table E.2-1 for a summary of sites.

In the 1820s, the NFD Point Molate property was part of a 17,983-acre (7,278-ha) Mexican land grant known as Rancho San Pablo. By 1870, a Chinese shrimp village, consisting of four independent shrimp camps, was established on the west side of San Pablo Peninsula. The camps were owned by the Union Shrimp Company. Each camp had an estimated 40 to 100 people, its own boat, wharf, boiling vat, drying grounds, living areas and storehouses. One of the camps was established on the NFD Point Molate property but was abandoned between 1912 and 1915 when the use of Chinese shrimp nets was banned. Buried archeological evidence of this camp exists on the property. See Appendix E, Table E.2-1 for a summary of sites.

In the late 1800s and early 1900s, private business began using the San Pablo Peninsula for fuel storage. In 1906, a quarry was established south of Point Molate. Between 1907 and 1919, the California Wine Association (Association) built and operated a full-service winery, known as Winehaven. The Association, established in 1894, was a corporation formed of individual wineries, wine merchants, and other members of the wine industry. The Association was the largest single wine producer and distributor in the state from 1900 until Prohibition in 1919.

In early 1906, the Association's largest storehouses, including wine blending and aging rooms, were in the City of San Francisco. These facilities and others in the Bay Area were decimated in the 1906 earthquake and fire. With the destruction of their buildings and product loss, the Association rebuilt their facilities with fireproof and reinforced materials on a 47-acre (19-ha) site now part of the NFD Point Molate property. Construction began in 1907 with the building of a reinforced concrete wine cellar (part of Building 6) and the Winehaven Hotel. The Winehaven Hotel, destroyed in 1957, was situated on a hill at the southern end of the Winehaven complex. A second wine cellar (Building 1) was constructed in 1908, as were the powerhouse (Building 13) and the loading platform and refrigeration building (Building 10). Major expansions were made to Buildings 1 and 6. Building 6 was expanded to more than three times its original size between 1913 and 1915, and Building 1 was expanded to the north in 1917.

Winehaven was a full-service winery: grapes were brought in by rail cars, off-loaded, and crushed. Millions of gallons of wine were fermented, stored, aged, blended, bottled and distributed. Because of its somewhat isolated location on the San Pablo Peninsula, the Association also built a small company town for its workers. Winehaven is an unusually intact company town of 29 residences, 2 large winery cellars, a shipping building, power plant, firehouse, and warehouse.

The location of Winehaven on the NFD Point Molate property was advantageous to the Association. The City had developed as an industrial town with excellent connections to transcontinental railroad lines and port facilities. The San Pablo Peninsula was linked by the Richmond Belt Line to the Richmond port and transcontinental rail lines. From the early 20<sup>th</sup> Century, the Richmond Belt Line, which served all of the City's western waterfront, enhanced industrial development throughout the area. Various spur lines from the Richmond Belt Line were established to serve industrial operations in the NFD Point Molate area. Winehaven was easily accessible by ship. Ocean-vessel harbors and wharves had been established near the NFD Point Molate property before the construction of Winehaven. As early as 1908, the Association built its own electric rail line to move materials within Winehaven from the Richmond Belt Line and the Winehaven wharf (which no longer exists) to the winery.

Winehaven was mostly unused from 1919 until the late 1930s. The NFD Point Molate property and some adjacent property were acquired in 1924 by the San Pablo Quarries Company. Some time between 1924 and 1939, the hill promontory at the Point was quarried away. Mining dramatically altered the setting of the Point and would have presumably destroyed archeological or historical remains at the quarry site. Construction of a rail spur line along the Bay margin also would have damaged or destroyed archeological sites. In 1941, the San Pablo Quarries Company sold the property to the Santa Cruz Oil Company, which leased it to Navy in 1942 and sold it to

Navy in 1945. Commissioned as a Naval Fuel Depot in 1943, the property was in operation during World War II. By 1944, Navy had installed dozens of large concrete fuel tanks on the hillsides above Winehaven and to the south. NFD Point Molate was the primary West Coast facility for the storage and distribution of petroleum products for the Pacific Fleet during World War II. Navy also built a new pier at the Point south of the Winehaven pier and filled in the area below the Point for drum storage and rail lines to the Navy pier.

Navy used the Winehaven buildings. The Winemaster's House (Building 60) became the Commanding Officer residence, and the other 28 cottages became residences for Navy families. The former winery buildings (Buildings 1 and 6) were used for storage and offices. Other buildings were also adapted for Navy use. The schoolhouse (which no longer exists) was used as a schoolhouse, Building 63 became the firehouse, and the warehouses were used for storage. The Winehaven Hotel (which no longer exists) was used as a cafeteria and temporary quarters. Winehaven has not changed much in appearance since 1919. There has been little new construction, and only a few of the pre-1919 structures have been demolished.

The property currently exists much as it did in 1960, when it was known as the U.S. Naval Fuel Annex, an annex to the Naval Supply Center, Oakland, which became the Fleet and Industrial Supply Center, Oakland. The Annex later became Naval Fuel Depot Point Molate, continuing to be administered by the Fleet and Industrial Supply Center, Oakland. It continued to operate as a military fuel depot during the Korean and Vietnam Wars and until it ceased its fueling mission in May 1995. The property is currently in caretaker status.

### 3.5.2 Cultural Resources Inventory and Evaluation

#### *Formally Recorded Resources*

The following is a summary of the cultural resources at NFD Point Molate that have been formally recorded:

- Winehaven Historic District (CA-CCO-422H).
- One historic archeological site (Chinese Shrimp Camp, CA-CCO-506H).
- Three prehistoric archeological sites (CA-CCO-282, -283, -423).

More information on these five recorded cultural resources is provided in Appendix E, Table E.2-1.

*National Register of Historic Places and California Register of Historic Resources:  
Listed Properties or Properties Eligible for Listing*

The only cultural properties included on or eligible for listing on the NRHP are the Winehaven Historic District (Figure 3.5-1), which is currently listed, and the historic archeological site referred to as the Chinese Shrimp Camp (CA-CCO-506H), which has been determined eligible in consultation with the California State Historic Preservation Officer (SHPO).

**Winehaven Historic District**

The Winehaven Historic District was listed on the NRHP in 1978 as site CA-CCO-422H. By its listing on the NRHP, in accordance with the California Register Act of 1992, Cal. Pub. Res. Code Sections 5020.1-5029 (West Supp. 1999) and 21084-21084.1 (West 1996), the Winehaven Historic District was automatically listed on the California Register of Historic Resources.

Winehaven is historically and architecturally important in the areas of wine production and industrial design. The winery buildings are examples of fireproof and seismically reinforced industrial buildings designed in response to the 1906 earthquake in Northern California. The buildings are unusual in their castellated, industrial Gothic design.

The Winehaven Historic District NRHP listing is based on an undated nomination form approved by the SHPO in 1976 and accepted by the Keeper of the National Register in 1978. The area occupies 71 acres (29 ha) of the 413-acre (167-ha) NFD Point Molate property. The 35 Winehaven historic buildings exist in a relatively compact 27-acre (11-ha) core historic area, along with 11 buildings that were built after Navy acquired Winehaven and therefore do not contribute to the historic district. The 35 contributing buildings are Building 1 (Wine Cellar), Building 6 (Wine Cellar), Building 10 (loading dock, refrigeration building), Building 13 (power house), Building 17 (warehouse), 28 cottages (Buildings 31 through 59), Building 60 (Winemaster's House), and Building 63 (warehouse/fire station). The 11 non-contributing buildings (such as the 8 multiple-vehicle garages built by Navy) are small in scale and are generally in keeping with the character of the historic residences. In addition to the 11 non-contributing structures within the core historic area, there are another 17 non-contributing structures within the Winehaven Historic District. These include fuel storage tanks, water treatment ponds, other associated fuel facilities, and some smaller-scale structures. Outside the Winehaven Historic District are large USTs and other associated fuel facilities.

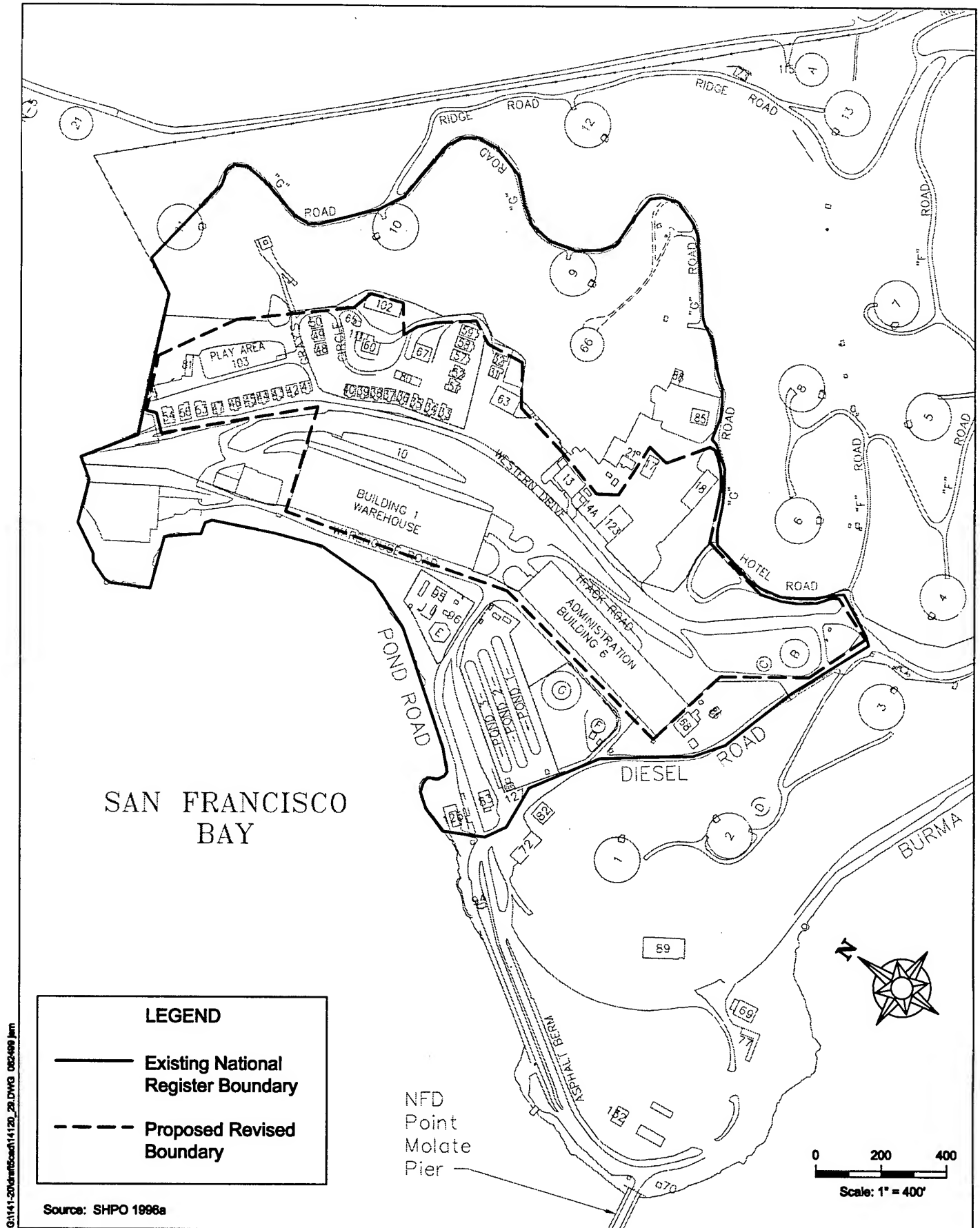


Figure 3.5-1: Winehaven Historic District

1995-96 Memorandum of Agreement to Place the 29 Family Housing Units into Caretaker Status. In 1995, Navy entered into an MOA with the SHPO for the abandonment of the 29 Winehaven family housing units. This MOA, accepted by the Advisory Council on Historic Preservation (ACHP) in February 1996, requires Navy to place the 29 family housing units into caretaker status until it is determined that these units cannot be reused or adaptively reused in a manner that would assure their preservation. At that time, after consulting the SHPO, Navy could allow the units to be relocated or demolished.

Navy also agreed to record the structures in accordance with National Park Service (NPS) guidance pursuant to Section 110(b) of the National Historic Preservation Act (NHPA), 16 U.S.C. § 470h-2(b). All of the Winehaven Historic District, including the six non-residential buildings, was recorded as directed by the NPS. This documentation (NPS no date) was accepted by the NPS on May 6, 1996 for inclusion in the Historic American Buildings Survey.

The Winehaven Historic District boundary was re-evaluated by Navy in 1996 (U.S. Navy 1996j), because the SHPO believed that the boundary for the 1976 nomination was larger than appropriate, as it included more acreage than the original winery. The proposed revised boundary (Figure 3.5-1) includes the 35 contributing buildings (and 11 non-contributing buildings) within the core historic area mentioned above, but it does not include the 17 non-contributing structures and area beyond the 27-acre (11-ha) core area. Navy received concurrence on the proposed boundary revision from the SHPO (SHPO 1996a). However, the NPS is interpreting the 1980 amendment to the NHPA as preventing the Keeper of the National Register from making administrative adjustments to properties listed before the 1980 amendment was enacted.

#### **Chinese Shrimp-Fishing Camp**

Buried archeological evidence of a Chinese shrimp-fishing camp exists at the NFD Point Molate property. These remnants of the camp could yield important historic information that could qualify the site for listing in the NRHP. The camp is listed as site CA-CCO-506H (U.S. Navy 1996d, 1996g; SHPO 1996b). By its eligibility for listing on the NRHP, the camp is automatically eligible for listing on the California Register of Historic Resources under the California Register Act of 1992.

#### **Protection of Historic Properties**

The regulations for the "Protection of Historic Properties" (36 C.F.R. Part 800) establish a process that Navy must follow to comply with Section 106 of the NHPA. This legislative mandate requires Navy to consider the effects of disposal and reuse of the NFD Point Molate property or other interim actions prior to approval of the action, and, where there will be an effect, afford the ACHP an opportunity to comment on the



undertaking. Navy has determined that the proposed action could adversely affect the cultural resources of NFD Point Molate.

#### *Properties Not Eligible for Listing*

The remains of the three prehistoric archeological sites identified at NFD Point Molate have been found, in consultation with the SHPO, not to qualify for listing in the NRHP. Each was greatly affected by the construction of Winehaven, its supporting infrastructure, the rock quarry that existed on the Point, and the subsequent improvements made by Navy. Native American skeletal remains were found at CA-CCO-283 in the late 1930s and relocated to the Lowie Museum (now the Phoebe Hearst Museum of Anthropology), University of California at Berkeley, in 1939 before the land was acquired by Navy. Archeological surveys of NFD Point Molate in the 1980s failed to find any evidence of CA-CCO-282. Disturbed elements of CA-CCO-283 and CA-CCO-423 were identified.

Recent assessments of World War II-era buildings and structures concluded that none are eligible for inclusion in the NRHP either individually or as a district (Wills et al. 1995; U.S. Navy 1996d; SHPO 1996b). Even though the basement of Building 1 was designated a regional nuclear bomb shelter in the 1950s and equipped with medical, communication, and living facilities, NFD Point Molate's role in the Cold War was not exceptional and therefore would not qualify the property for listing on the NRHP as a Cold War resource.

#### **3.5.3 Plans and Policies**

The plans and policies discussed below are relevant to the disposal and reuse of the NFD Point Molate property.

##### *Federal*

The NHPA Section 106, 16 U.S.C. § 470f and its implementing regulations, 36 C.F.R. Part 800 (1999), require Federal agencies to consider the effects of their actions on properties listed, or eligible for listing, in the NRHP. It also requires that agencies provide the ACHP an opportunity to comment on actions that could directly or indirectly affect properties included in or eligible for inclusion in the NRHP. Section 110(a)(2) of the NHPA requires that Navy establish a program to locate, inventory, and evaluate all historic properties under its jurisdiction that may qualify for listing in the NRHP and to nominate such properties. Other Department of Defense (DOD) and Navy cultural resource directives include DOD Directive 4710.1 of 21 June 1984 and Secretary of the Navy Instruction (SECNAVINST 4000.35), Archeological and Historic Resources Management, and Department of the Navy (OPNAVINST 5090.1B ch-1 Chapter 23) of February 1998, Historic and Archeological Resources Protection.

Also pertaining to cultural resources are the Archeological Resources Protection Act (ARPA) of 1979, 16 U.S.C. § 470aa-11, and the Native American Graves Protection and Repatriation Act (NAGPRA) of 1990, 25 U.S.C. §§ 3001-3013. ARPA establishes a permitting process for the study and excavation of archeology on Federal land, as well as civil and criminal penalties for unauthorized excavation, defacement, or destruction of important archeological resources on Federal lands. NAGPRA requires Federal agencies and museums receiving Federal funds to inventory and repatriate human remains, associated funerary objects, sacred items, and objects of cultural patrimony to Native Americans. Items must be returned upon request to lineal descendants or to Indian tribes with the closest cultural affiliation. Human remains collected from Point Molate were exhumed before the land was acquired by the Federal government and are therefore are not the responsibility of Navy. However, should any Native American human remains, grave goods, or sacred items be found at the NFD Point Molate property prior to conveyance from Navy, they would be subject to NAGPRA.

#### *State*

The California Register Act of 1992, Cal. Pub. Res. Code 5020.1-5029 (West Supp. 1999) and 21084-21084.1 (West 1996), offers specific guidance for protecting archeological resources. The California Register of Historical Resources is a listing of significant historic property in the state, similar to the NRHP. NRHP-listed properties are automatically listed in the California Register of Historical Resources. Section 21084 of the Cal. Pub. Res. Code provides instructions on the treatment of projects that may result in a "substantial adverse change" to historic properties. Generally, a project that could cause a "substantial adverse change" in a California Register of Historical Resources property is regarded as having the potential for a significant impact on the environment.

In addition to the requirements of the California Register Act, special protection is provided under state law for historic properties that are owned by the state. Executive Order (E.O.) W-26-92, issued in April 1992, mandates that state agencies, when prudent and feasible, maintain and preserve historic properties under their jurisdiction. No state agency may destroy a historic resource under its jurisdiction without first seeking the advice and comments of the SHPO.

The State Historical Building Code (part 8, Title 24, State Building Standards Code) provides alternatives to the UBC for the rehabilitation, preservation, restoration, and relocation of historic buildings.

#### *Local*

The City designates "historical structures" (defined as sites, buildings, structures, and groups of structures of particular historic significance) pursuant to the Richmond

252 Municipal Code, Chapter 6.06, Ordinance Number 24-82 N.S., Historic or  
253 Architecturally Significant Structures Ordinance. Application approval is required for  
254 demolition, structural alteration, or removal of a City-designated historic structure. The  
255 City's protection, built into its local ordinance, includes standards for design review of  
256 exterior modifications to historic structures consistent with the *Secretary of the Interior's*  
257 *Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings* (U.S.  
258 Department of the Interior 1992).

## 3.6 BIOLOGICAL RESOURCES

This section describes biological resources in the ROI of NFD Point Molate. The ROI for biological resources is the NFD Point Molate property and areas of native habitat within one mile (1.6 km) of the property. The one-mile (1.6-km) radius was chosen to include contiguous patches of habitat adjacent to the property and to provide a buffer zone beyond which site activities would be unlikely to affect biological resources. Biological resources include vegetation, fish and wildlife, sensitive species, and sensitive habitats.

### 3.6.1 Background Information

Information regarding sensitive species was obtained from the California Natural Diversity Database (California Department of Fish and Game [CDFG] 1995a), U.S. Fish and Wildlife Service (USFWS) (USFWS 1995b), NFD Point Molate special-status plant survey (U.S. Navy 1998f), *Endangered, Threatened and Candidate Species on Navy and Marine Corps Lands: A Base Specific Handbook for Point Molate* (U.S. Navy 1994a), *Natural Resource Management Plan, Point Molate Fuel Supply Depot* (U.S. Navy 1987), and *Master Plan for Naval Supply Center, Oakland, California* (U.S. Navy 1988). In addition, biological site surveys were conducted in June 1995 and a wetland delineation in April 1996 (U.S. Navy 1996e).

### 3.6.2 Vegetation Communities

The NFD Point Molate property contains a variety of upland and coastal vegetation communities, as well as invasive and exotic species in areas of disturbance. The upland communities include landscaped areas, grasslands, brushlands, eucalyptus woods, coast live oak woodlands, coastal bluffs, coastal prairie, willow thickets, and freshwater marshes. The coastal vegetation communities include coastal bluffs, sandy and rocky beach areas, saltwater and freshwater marshes, and extensive offshore mudflats dominated by eelgrass beds.

### 3.6.3 Fish and Wildlife

Wildlife on the site is typical of that found in shoreline areas of the Bay region. Large mammals at the site include mule deer (*Odocoileus hemionus*), coyote (*Canis latrans*), red fox (*Vulpes vulpes*), raccoon (*Procyon lotor*), and striped skunk (*Mephitis mephitis*). Small mammals include the California vole (*Microtus californicus*), deer mouse (*Peromyscus maniculatus*), Botta's pocket gopher (*Thomomys bottae*), California ground squirrel (*Spermophilus beechyi*), and black-tailed hare (*Lepus californicus*). Animal species potentially occurring at the NFD Point Molate property are listed in Appendix E, Table E.3-1.

The variety of vegetation found on the NFD Point Molate property supports many bird species. Coastal aquatic areas attract shorebirds, ducks, and ocean birds, such as gulls,

mallards, cormorants, and herons. The upland areas support raptors, such as the red-tailed hawk (*Buteo jamaicensis*), northern harrier (*Circus cyaneus*), American kestrel (*Falco sparverius*), and great horned owl (*Bubo virginiana*). Other upland bird species are the turkey vulture (*Cathartes aura*), white-crowned sparrow (*Zonotrichia leucophrys*), western meadowlark (*Sturnella neglecta*), and blackbirds (*Agelaius spp.*).

Reptiles found at the site include the western fence lizard (*Sceloporus occidentalis*), southern alligator lizard (*Gerrhonotus multicarinatus*), terrestrial garter snake (*Thamnophis elegans*), and gopher snake (*Pituophis melanoleucus*). Amphibians observed include the slender salamander (*Batrachoseps attenuatus*) and the Pacific chorus frog (*Hyla regilla*).

A wide variety of fish and marine invertebrates occur in the Bay waters offshore of the NFD Point Molate property. Fish species common to the offshore waters include striped bass (*Morone saxatilis*), topsmelt (*Atherinops affinis*), and shiner surfperch (*Cymatogaster aggregata*). Freshwater invertebrates and small fish have been observed in the brackish lagoons on the property. No freshwater fish have been observed in the intermittent streams on the property.

### 3.6.4 Sensitive Species

#### Definition

Sensitive species are defined as follows:

- Listed by the USFWS or by the CDFG as endangered, threatened, or proposed for endangered or threatened status.
- Candidate species for endangered or threatened status.
- Plants listed by the California Native Plant Society (CNPS).
- Species of special concern as listed by the CDFG.

No Federal or state sensitive species are known to inhabit the NFD Point Molate property.

Endangered and threatened fish and wildlife species with ranges that include the NFD Point Molate property are listed in Appendix E, Table E.3-2. Other sensitive species known to be present within a 1-mile (1.6-km) radius of the project site are listed in Appendix E, Table E.3-3.

#### Sensitive Plants

No Federal or state sensitive plant species are known to inhabit the NFD Point Molate property. Plant species observed at the NFD Point Molate property are listed in Appendix E, Table E.3-4. A CNPS special-status plant, the marsh gumplant (*Grindelia stricta* var. *angustifolia*), has been found in scattered populations along the immediate

shoreline of the NFD Point Molate property (total population estimated at 400 individuals [U.S. Navy 1998f]). This saltmarsh species has no Federal or state status but is on CNPS List 4 (plants of limited distribution). This endemic California species is considered rare (not endangered) but found in sufficient numbers that the potential for extinction or extirpation is low (U.S. Navy 1998f).

#### ***Sensitive Animals***

No endangered or threatened animal species have been found on the NFD Point Molate property. Marginal freshwater habitat exists for the California red-legged frog (*Rana aurora draytonii*), a proposed Federal endangered species, but no red-legged frogs have been found on the site or in similar habitats in surrounding areas (U.S. Navy 1998f).

A number of sensitive species are likely to transit through the site: the American peregrine falcon (*Falco peregrinus anatum*), California brown pelican (*Pelecanus occidentalis californicus*), California least tern (*Sterna antillarum browni*), and western snowy plover (*Charadrius alexandrinus nivosus*) (U.S. Navy 1987, 1994a). The National Marine Fisheries Service (NMFS) reports that winter-run chinook salmon (*Oncorhynchus tshawytscha*), a Federally listed threatened species, uses the deep-channel Bay waters near the site during their yearly migration.

#### **3.6.5 Sensitive Habitats**

Sensitive habitats are ecosystems that provide a vital role in the health of the local natural environment and are either listed by regulatory agencies or of local concern. There are four types of sensitive habitats found within the ROI of NFD Point Molate: jurisdictional freshwater wetlands, saltwater wetlands, offshore eelgrass beds, and coastal prairie native plant communities.

A total of about 0.8 acres (0.32 ha) of U.S. Army Corps of Engineers (U.S. ACE) jurisdictional wetlands occur on the property (Figure 3.6-1). These consist of approximately 0.3 acres (0.12 ha) of freshwater marshes (sites A, B, and C) and approximately 0.5 acres (0.2 ha) of tidally influenced saltwater marsh (Site D). Wetland plant species found in the freshwater marshes include slough sedge (*Carex obnupta*), soft rush (*Juncus effusus*), broad-leaf cattail (*Typha latifolia*), tall flatsedge (*Cyperus eragrostis*), toad rush (*Juncus bufonius*), curly dock (*Rumex crispus*), sedge (*Scirpus* spp.), and arroyo willow (*Salix lasiolepis*) (U.S. Navy 1996h). The saltwater marsh is located along the western border of the NFD Point Molate property, south of the pier. It is vegetated by the wetland species pickleweed (*Salicornia virginica*), California cordgrass (*Spartina foliosa*), marsh gumplant (*Grindelia stricta* var. *angustifolia*), and seashore saltgrass (*Distichlis spicata*). In addition, a large eelgrass bed (approximately 12 acres [4.9 ha]) lies off the western shore of the property (Figure 3.6-1).

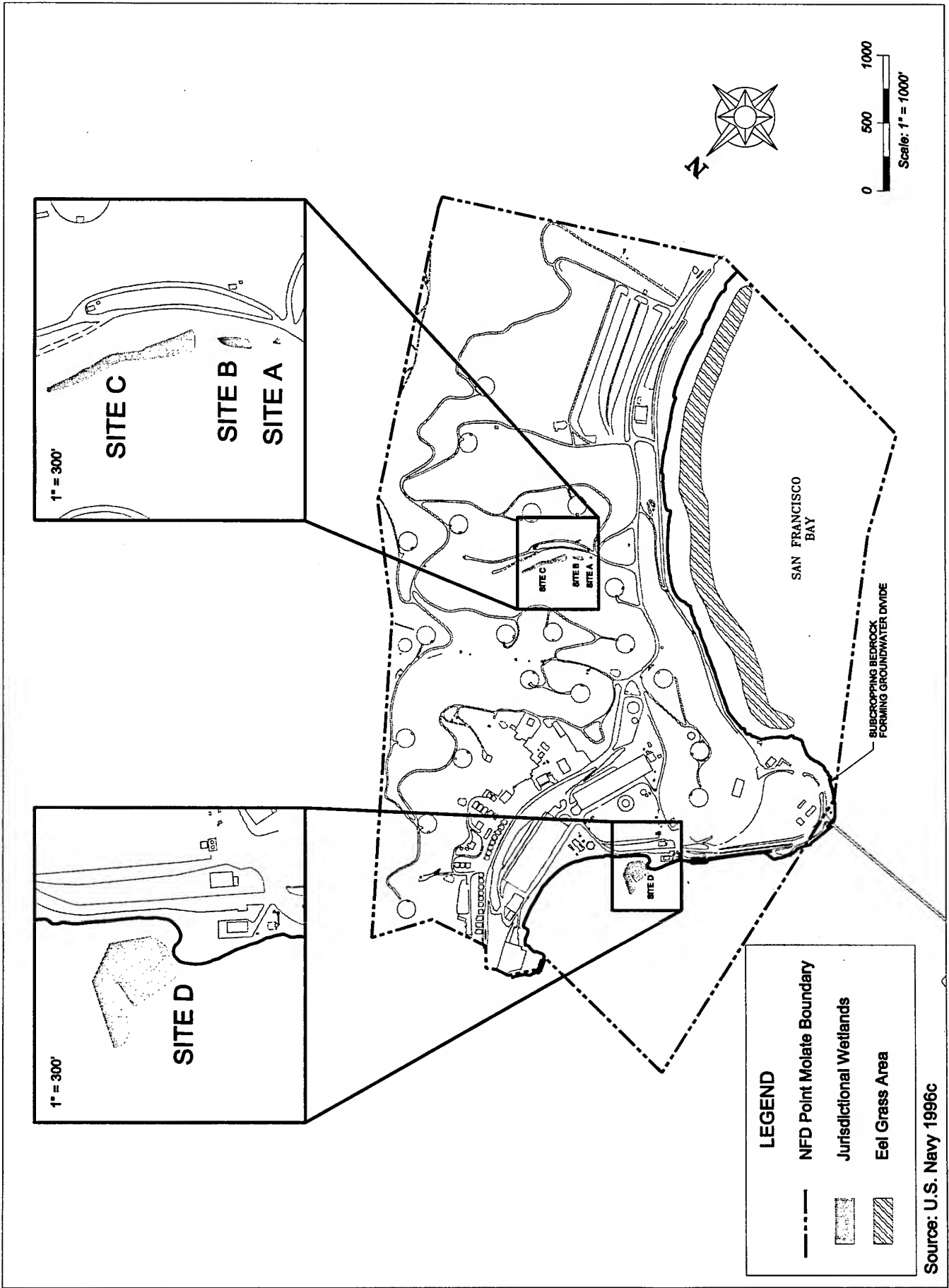


Figure 3.6-1: Location of Sensitive Habitats at the NFD Point Molate Property

### 3.6.6 Plans and Policies

The plans and policies discussed below are relevant to the disposal and reuse of NFD Point Molate.

#### *Federal*

##### **Federal Endangered Species Act**

The Federal Endangered Species Act (ESA), 16 U.S.C. §§ 1531-1544, directs that all Federal agencies and departments use their authority to conserve endangered and threatened species. Section 7 of the ESA requires a Federal agency to consult with USFWS (or NMFS for some species). Federal agencies are prohibited from activities that USFWS determines could jeopardize the continued existence of threatened or endangered species. Federal actions that would result in the killing, harming, or harassing of an endangered or threatened species can only be performed if USFWS grants a permit for such actions. Similarly, under Section 10(a) of the ESA, projects proposed by state and local agencies, as well as private entities, that would adversely affect an endangered or threatened species can only be implemented if a permit is granted by USFWS for the project.

##### **Migratory Bird Treaty Act**

The Migratory Bird Treaty Act, 16 U.S.C. §§ 703-712, prohibits the taking of individuals, nests, or eggs of a migratory bird species. This act does not apply to Federal actions but would apply to community reuse of NFD Point Molate.

##### **Clean Water Act**

U.S. ACE has jurisdiction over wetlands under Section 404 of the Clean Water Act (CWA), 33 U.S.C. §§ 1251-1387. Wetlands are considered important to the public interest in that they perform significant biological functions, such as providing resting, breeding, foraging, and spawning habitat for a wide variety of resident and migratory animal species (U.S. ACE Regulatory Program Regulations, 33 C.F.R. Section 320.4). Section 404 gives U.S. ACE the authority to regulate alterations to waterways (such as the filling of wetlands) of the U.S.

##### **Wetlands**

Protection of Wetlands, E.O. No. 11990, 3 C.F.R. 121 (1978), reprinted in 42 U.S.C. § 4321 note at 466-68, requires that any transfers of Federal properties containing wetlands to a non-Federal entity reference in the conveyance any uses that are restricted under identified Federal, state, or local wetland regulations. The E.O. also requires Federal agencies to avoid construction in wetlands and implement all practicable measures to minimize harm to wetlands.



**State**

**California Endangered Species Act**

California has procedures similar to the Federal ESA for non-Federal projects under the California Endangered Species Act, California Fish and Game Code Sections 2050-2116. The CDFG can adopt a Federal Biological Opinion (in accordance with Section 7 of the Federal ESA) as a state Biological Opinion under California Fish and Game Code Section 2095.

**CDFG Code 1603: Wetlands Policies**

The CDFG has the authority to reach an agreement with a project proponent proposing to affect intermittent or permanent streams and other wetlands pursuant to Section 1603 of the California Fish and Game Code. The CDFG generally evaluates the information gathered during preparation of the environmental analysis and attempts to satisfy its concerns during the CEQA process. In accordance with its policy of "no net loss" of wetland habitat, the CDFG requires completion of a streambed alteration agreement for actions that affect streams and wetlands. This agreement is made between a project proponent and the CDFG to minimize adverse effects on streams and wetlands. The reuse of NFD Point Molate would come under CDFG authority regarding development that could affect wetlands.

**Vegetation Control for Fire**

State fire regulations (California State Assembly Bill [AB] 337) require that all building structures be surrounded by a 30-foot (9.1-m) fire break in which the only vegetation allowed is decorative landscaping, which must be maintained and watered. This area must be surrounded by a 70-foot (21-m) fuel break, in which all grass is cut to less than 6 inches (15 centimeters [cm]), and wild plants are not allowed to grow over 18 inches (46 cm) high. State fire regulations also require that trees be delimbed on the bottom one-third of their height, not to exceed 10 feet (3 m) in taller trees. Public rights-of-way must have a 10-foot (3-m) fire break zone maintained on either side. Local fire regulations are the same as the state's.

**Local**

The General Plan Open Space and Conservation Element provides policies and guidelines that protect biological resources. The following are applicable to the reuse of the NFD Point Molate property.

- Preserve habitats shown to be necessary for the preservation of rare and endangered plants and animals (Policy OSC-A.1).
- Preserve unique plant communities and wildlife habitats. These include (1) particularly good examples of typical area habitats, which can be used for classroom

study purposes; and (2) habitats that are unique or rare in the Planning Area, such as native grassland communities (Policy OSC-A.2).

- Discourage filling, dredging and/or development that would have a significant adverse impact on the biological productivity or aesthetic character of the physical features of the area (Policy OSC-B.1).
- Require mitigation measures to avoid any detrimental impacts of development on the biological productivity or aesthetic character of open water, marsh, mudflat or tideland (Policy OSC-B.2).
- Require mitigation measures to avoid any significant detrimental impacts of development on the biological productivity of existing open water, marsh, mudflat and tideland areas to the maximum extent feasible. Such measures shall include, but shall not be limited to, preservation of transitional upland areas adjacent to tidelands to serve as a buffer zone (Policy OSC-C.1).
- Require all new waterfront development, and encourage existing waterfront development, to provide a reasonable degree of buffering between such development and adjacent marsh and mudflat areas (Policy OSC-C.2).
- Preserve stream beds, water courses and channels in their natural state except where needed for flood and erosion control (Policy OSC-I.2).
- Prevent creek bank erosion, preserve wildlife habitat, protect the scenic quality of the creeks, and secure public access to the natural waterways (Policy OSC-I.4).
- Protect the City's waterways and the Bay from runoff containing high concentrations of pesticides and fertilizers, industrial wastes, or other contaminants (Policy OSC-M.2).
- Conserve those natural wildlife habitats which support native species of plants and animals (Policy OSC-Q.1).

There is one guideline for the West Shoreline Planning Area that is applicable to the NFD Point Molate property:

- Evaluate any proposals for the use of San Pablo Peninsula, Point Pinole, and the waters around Castro Rocks with attention to their effects on the deer population, the monarch butterfly, and the harbor seal, respectively (OSC Area-Specific Guidelines, West Shoreline Guideline No. 1).

The City's Department of Public Works has a Weed Abatement and Rubbish Program (Richmond Municipal Code Section 12.12), which requires all vacant/open space property owners to have a vegetation management plan filed with the City and revised yearly.

### 3.7 WATER RESOURCES

This section describes water resources in the ROI of NFD Point Molate. The ROI for water resources is the NFD Point Molate property, immediately adjacent areas, underlying groundwater, and adjacent Bay waters that could affect or be affected by reuse activities. Water resources include groundwater and surface water. The effects of past uses on groundwater quality are discussed in Section 3.13.1. Storm water system issues are addressed in Section 3.12, Utilities.

#### 3.7.1 Groundwater

##### *Groundwater Occurrence*

Groundwater below NFD Point Molate property occurs in four water-bearing strata (U.S. Navy 1996h):

- Near-shore unconsolidated sediments.
- Local alluvial channel deposits on hill slopes.
- Unconsolidated fill materials overlying rocks with low permeability.
- Fractured Franciscan formation bedrock.

No true aquifers capable of producing substantial quantities of water are present on the NFD Point Molate property. As a result, there are no groundwater uses.

Groundwater recharge occurs in the up-gradient hillsides primarily during rainstorms in the wet season (November through February). Monitoring well data indicate that the groundwater level is influenced more by recharge than by tidal influence along the shoreline (U.S. Navy 1995).

The depth to groundwater increases with distance from the shoreline. In the treatment ponds area (Section 3.13), the depth to the water table increases from zero at the shoreline to about 15 feet (4.6 m) below ground surface (bgs), dropping to about 40 feet (12.2 m) bgs at Western Drive. Groundwater depths of over 100 feet (30.5 m) have been measured beneath the slopes to the east of Western Drive.

##### *Groundwater Flow*

Groundwater flow is controlled by the steep topography at the NFD Point Molate property. Groundwater moves from higher elevations down toward the Bay. Gradients are steep in the hillside areas and flatten as they approach the Bay (U.S. Navy 1995). Manmade structures (such as an extraction trench discussed in Section 3.13) alter the direction of groundwater flow in some areas of the property.

Groundwater is found closer to the surface (groundwater mounding) beneath the unlined treatment ponds because of local recharge. The groundwater flow direction in the vicinity of the treatment ponds area is outward in all directions except in the up-gradient (northeastern) direction. A subsurface cutoff wall located directly down-gradient of the treatment ponds provides a partial hydraulic barrier, resulting in a sharp gradient (U.S. Navy 1995).

### 3.7.2 Surface Water

Surface water at NFD Point Molate flows westward from the upland areas toward the Bay. Runoff flows overland into a system of natural channels and ravines that drain the property. Water that falls on impermeable surfaces, such as roads and parking lots, travels downslope by surface flow.

Two independent systems were installed at the NFD Point Molate property to control surface water runoff and to prevent erosion and flooding. One system serves the developed areas (primarily roads and parking lots). It consists of catch basins and storm water sewers that collect and direct water to the Bay at outfalls. The other system (oil recovery system) serves the UST area on the hillside. Formerly, this system collected and treated surface and shallow subsurface waters (some of which might have been contaminated with hydrocarbons) before discharge to the treatment plant or the Bay. Storm water from the UST area is now directed to the treatment ponds.

The existing storm water system is operating under Industrial Activities Storm Water General Permit No. CAS000001. In compliance with the CWA and National Pollutant Discharge Elimination System (NPDES) permitting requirements, the Navy has a Storm Water Pollution Prevention Plan (SWPPP) identifying best management practices (BMPs), to be implemented to control storm water runoff, and a Storm Water Management Plan, which includes procedures for conducting wet- and dry-weather observations and collecting storm water samples from discharge locations (U.S. Navy 1992a).

Navy is currently responsible for environmental compliance activities associated with storm water discharge, including management of permits, monitoring, reporting, and liaison with regulatory agencies. After property conveyance, responsibility for NPDES compliance would be the responsibility of the future reuse entity.

The treatment ponds currently operate under NPDES Permit No. CA0030074, which specifies effluent limitations (water quality standards) that must be met prior to discharge to the Bay. The treatment ponds will be closed before transfer of the property.

### 3.7.3 Tide and Wave Runup

The NFD Point Molate property is not subject to flooding from streams. The waterfront portion of the property would be subject to tides of 6.2 feet (1.9 m) National Geodetic Vertical Datum (NGVD), which could be 3 to 4 feet (0.9 to 1.2 m) higher during storm events due to wind-driven wave runup (U.S. ACE 1984). Therefore, structures below about 10 feet (3.1 m) NGVD could be affected by storm waves at high tides. With the possible exception of the sewage treatment plant, no existing buildings on the property are below this elevation (City of Richmond 1997a).

The waterfront portion of the site could be subject to tsunami runups of up to 3.5 feet (1 m) above tidal conditions at the time (Section 3.8.5).

U.S. EPA has estimated that sea level rise associated with global warming would be approximately 4 to 6 inches (10 to 15 cm) by 2006 and up to 10 inches (25 cm) by 2036 (U.S. EPA 1995). If this predicted rise in sea level occurs, it would raise the wave and tide heights described above accordingly.

### 3.7.4 Plans and Policies

The plans and policies discussed below are relevant to the disposal and reuse of the NFD Point Molate property.

#### *Federal*

In recent years, regulatory emphasis at the national level has been directed toward the management of water pollution resulting from municipal storm drain systems, construction sites, and industrial activities. Following the 1987 amendments to the CWA, 33 U.S.C. §§ 1251-1387, and subsequent 1989 Federal storm water regulations promulgated by U.S. EPA, discharges of storm water runoff from such sources have been brought under the NPDES permitting process. In California, U.S. EPA has delegated administration of the Federal NPDES program to the state.

#### *State*

The State Water Resources Control Board issues statewide General NPDES permits for construction sites and industrial activities. The Regional Water Quality Control Boards (RWQCBs) issue and enforce individual municipal permits and take the lead in enforcing the General Permits within their respective regions.

For construction projects that involve more than 5 acres (2 ha), developers or their contractors are required to apply for an NPDES General Construction Permit to control storm water runoff from construction sites. Compliance with the permit requires filing a Notice of Intent and the preparation of a SWPPP, which must include BMPs to prevent

erosion, trap pollutants before they migrate off site, and prevent pollutants from mixing with storm water.

### *Regional*

#### **Regional Water Quality Control Board**

In the San Francisco Bay RWQCB Water Quality Control Plan for the San Francisco Bay Basin (WQCP) (RWQCB 1995), NFD Point Molate is in the "San Francisco Bay Central" zone of the San Francisco Bay Basin. The following beneficial uses for San Francisco Bay Central are listed:

- Ocean, Commercial and Sport Fishing
- Estuary Habitat
- Industrial Service Supply
- Fish Migration
- Navigation
- Industrial Process Supply
- Preservation of Rare and Endangered Species
- Water Contact Recreation
- Non-Contact Water Recreation
- Shellfish Harvesting
- Fish Spawning
- Wildlife Habitat

Although NFD Point Molate has no true aquifers and supports no groundwater uses, it is defined in the WQCP as being on the "East Bay Plain" groundwater basin. Beneficial uses for the East Bay Plain are listed as follows:

- Municipal and Domestic Water Supply
- Industrial Process Supply
- Industrial Service Supply
- Agricultural Supply

The WQCP establishes objectives for beneficial uses that guide the RWQCB in implementing the WQCP implementation measures. Objectives are "narrative" and "numerical." The WQCP defines the narrative objectives as general descriptions of water quality that must be obtained through pollutant control measures and watershed management. Narrative objectives also serve as the basis for the development of detailed numerical objectives. The numerical objectives typically describe the pollutant

concentrations, physical/chemical conditions of the water itself, and the toxicity of the water to aquatic organisms. These objectives are designed to represent the maximum amount of pollutants that can remain in the water column without causing adverse effects on organisms using the aquatic system as habitat, on people consuming those organisms or water, and on other current or potential beneficial uses.

#### *Local*

The Open Space and Conservation Element of the General Plan provides policy direction for the management of water resources. The following policies are applicable to the NFD Point Molate property.

- Adopt flood control systems which maintain the natural qualities of the creeks as much as possible (Policy OSC-I.1).
- Preserve stream beds, water courses, and channels in their natural state except where needed for flood or erosion control (Policy OSC-I.2).
- Control soil erosion to prevent flooding and destruction of natural waterways, to maintain water quality, to reduce public costs for flood control works, and to prevent damage to construction sites (Policy OSC-I.3).
- Reject any development proposal which would deplete or degrade the groundwater supply (Policy OSC-K.1).
- Restrict construction of impervious surfaces in stream beds, which are essential to groundwater recharge (Policy OSC-K.2).
- Provide for the monitoring and protection of groundwater through environmental review (Policy OSC-K.5).
- Prevent deterioration of water quality and danger to public health by requiring all new developments to hook up to existing sewage systems (Policy OSC-L.1).

Section 12.44.030 of the City's Building Department Excavation, Grading and Earthwork Construction Ordinance requires that an interim and final Erosion and Sediment Control Plan be prepared by a registered civil engineer. The interim plan defines measures to minimize erosion, sedimentation, and fugitive dust during project construction. The final plan includes permanent control features to minimize soil erosion, maximize sediment interception, and control runoff from the completed project.

## 3.8 GEOLOGY AND SOILS

This section describes geology and soils in the ROI of NFD Point Molate. The ROI for geology and soils is the NFD Point Molate property and underlying formations. This section describes site physiography, topography, geologic materials, geologic hazards, and seismic hazards.

### 3.8.1 Physiography

The NFD Point Molate property lies along the northeastern margin of the Bay within the Coast Ranges Geomorphologic Province of California. The Province is defined by the north- to northwest-trending Coast Ranges, which are traversed by numerous faults of the San Andreas fault system (Figure 3.8-1). The dominant geologic processes that have shaped the Bay Area region are active faulting along the San Andreas, Hayward, and other faults; uplift and erosion of the East Bay and San Francisco Peninsula hills; and subsidence of the San Francisco Bay basin.

### 3.8.2 Topography

The NFD Point Molate property is located on the western shoreline of Potrero Ridge, a northwest-trending peninsula that extends into the Bay. The site includes level areas near the Bay and steep slopes on the ridge. Elevations range from mean sea level (MSL) along the mudflats at the shoreline to approximately 440 feet (134 m) above MSL at the ridge line along the eastern boundary of the site (U.S. Geological Survey [USGS] 1993a). This topographic variation occurs over a short distance (2,000 feet [610 m]), creating steep grades with slopes in excess of 2:1 (horizontal:vertical) at some points. The hillside topography has been modified to create flat areas for USTs and service roads. Some fill was placed in the shoreline areas.

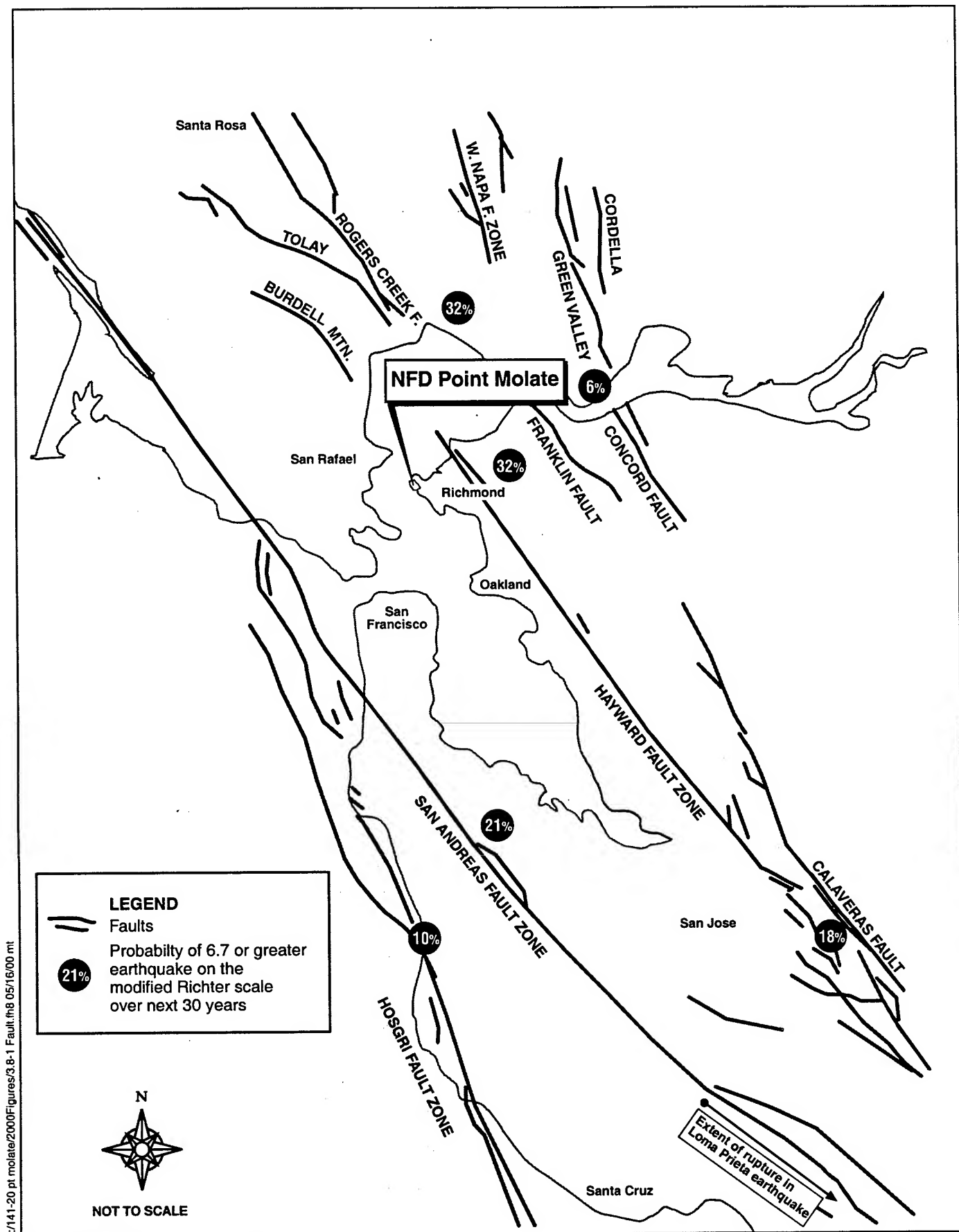
### 3.8.3 Geologic Materials

The geologic materials underlying the NFD Point Molate property are divided into three groups: undifferentiated Franciscan formation bedrock; young unconsolidated deposits that include alluvial, colluvial, Bay Mud deposits; and fill material. A generalized geologic map of the property is presented as Figure 3.8-2.

Bedrock at the NFD Point Molate property is composed of the Franciscan formation. Bedrock is exposed at locations on the hillsides and occurs up to 60 feet (18 m) below the surface beneath the Bay Mud, colluvium (loose slope deposits), alluvium (loose clay, silt, and gravel deposited in low areas by streams), and fill that occupy lower elevations. The Franciscan formation at the site generally consists of sandstone, quartzite, or siltstone with interbedded mudstone or shale.

Colluvium usually overlies bedrock. Colluvium is found in deposits up to 25 feet (7 m) thick on the slopes and the base of slopes, filling many of the ravines throughout the site.

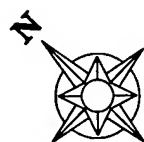
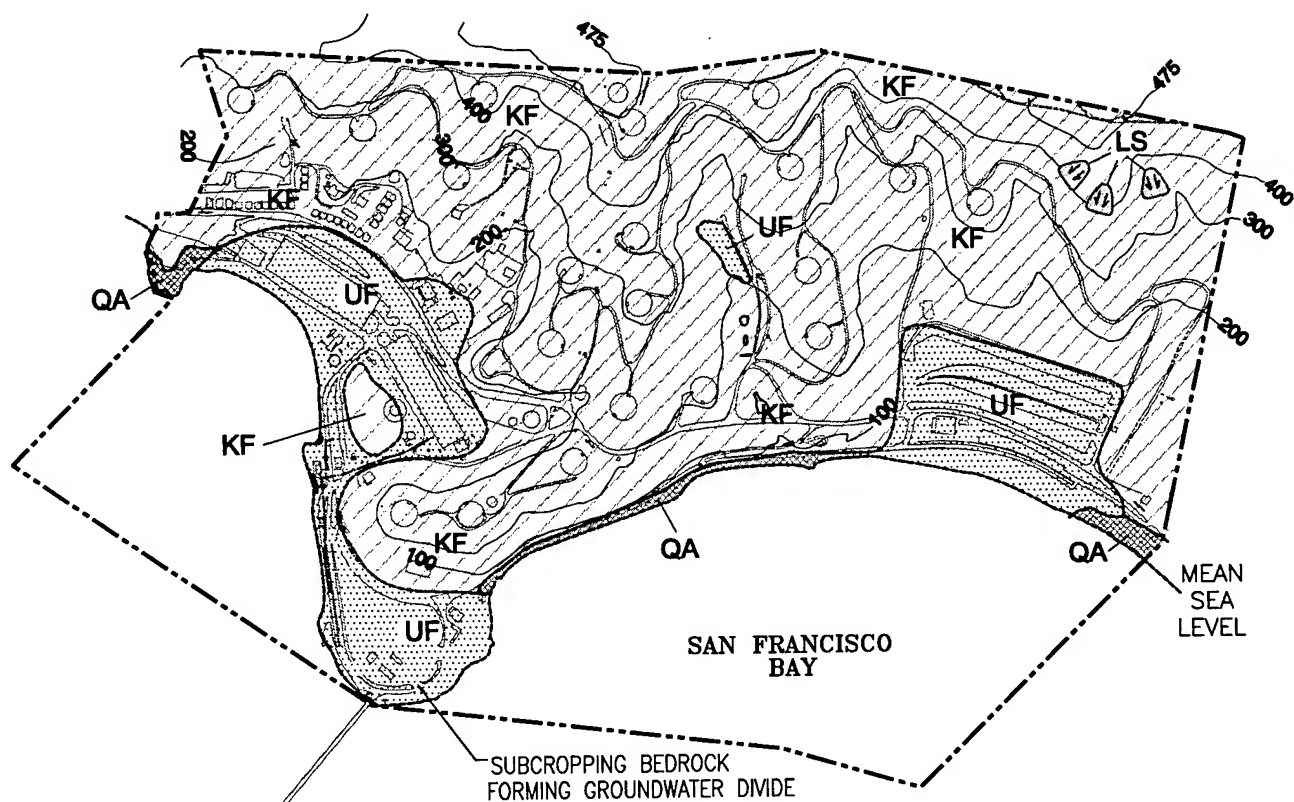




P:\141-20 pt molate\2000\Figures\3.8-1 Fault.fh8 05/16/00 mt

Source: USGS 1999

Figure 3.8-1: Fault Zone and Individual Fault Location Map



0 500 1000  
Scale: 1" = 1000'

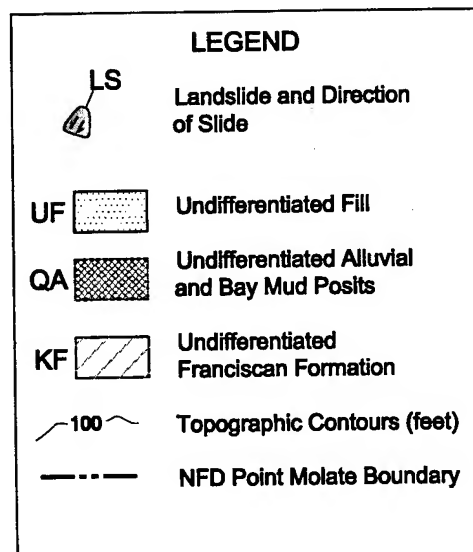


Figure 3.8-2: Geologic Map of NFD Point Molate

Alluvium is present in more gently inclined areas. Alluvium consists of moderately sorted, fine- to medium-grained, unconsolidated sand.

Some fill materials at lower elevations were transported from other areas on the NFD Point Molate property. The composition of fill is highly variable, consisting of poorly sorted gravel, silt, sandy silt, sandy clay, and bedrock fragments. The fill material varies in thickness from 18 to 57 feet (5.5 to 17 m). It overlies Bay Mud and marsh deposits in the former treatment pond area.

Bay Mud is present along the shoreline and on NFD Point Molate submerged land. It ranges in thickness from 30 feet (9 m) near the shoreline to (presumably) zero to the east (the subsurface distribution of Bay Mud is not known). The Bay Mud is a clayey or sandy silt or silty sand but contains sufficient clay and silt to serve as an aquitard (a layer impermeable to water).

#### **3.8.4 Geologic Hazards**

##### ***Landslides***

The areas within the NFD Point Molate property with the greatest potential for landsliding are those on the steep hillsides. Three small landslides are shown on Figure 3.8-2. These slides are local in extent and are likely to have shallow slip surfaces. Landslides are most likely to occur during periods of high rainfall or runoff or during earthquakes.

##### ***Erosion***

The highest potential for erosion occurs on the steeper slopes, in areas where vegetation has been removed and slopes artificially over-steepened, such as cut or fill slopes. Some areas on the steeper slopes where vegetation is sparse are highly eroded. The erosion is local in extent in these areas.

#### **3.8.5 Seismic Hazards**

##### ***Ground Shaking***

The Bay Area experiences strong and violent ground shaking during large earthquakes occurring on major active fault zones within the region (USGS 1999). Ground shaking, and the resulting potential for damage, is considered the primary seismic hazard at the NFD Point Molate property. The severity of ground shaking is influenced by a number of factors, including the duration and intensity of the earthquake, proximity to the epicenter, and the type of underlying materials. No major damage from the recent Loma Prieta earthquake of 1989 was reported at the NFD Point Molate property.

The Bay Mud and uncompacted fill materials that underlie the western part of the NFD Point Molate property can be expected to amplify and prolong ground shaking

associated with an earthquake. During the Loma Prieta earthquake, the recorded peak accelerations at Bay Area sites underlain by fill materials and Bay Mud were more than three times greater than the peak accelerations at nearby bedrock locations such as Yerba Buena Island (Carlisle and Rollins 1994). As a result, ABAG predicted that amplification of seismic waves in East Bay fill materials would be high compared to other Bay Area geological materials. It is predicted that an earthquake with a magnitude of 7.1 on the northern part of the Hayward Fault would cause significant structural damage due to ground shaking (Perkins and Boatwright 1995).

Estimates by the USGS (1999) for the probability of a large earthquake (Richter magnitude of 6.7 or greater) occurring on Bay Area faults are presented in Figure 3.8-1.

#### *Fault Rupture*

No active faults or faults that fall under the Alquist-Priolo Earthquake Fault Zoning Act of 1972, Cal. Pub. Res. Code Sections 2621-2624 (West Supp. 1999), have been mapped on the property. The nearest active fault is the Hayward Fault, located about 5 miles (8 km) east of the property. The San Andreas Fault lies about 15 miles (24 km) to the west, and the Calaveras Fault lies about 15 miles (24 km) to the southeast (Figure 3.8-1). Inactive faults located on or near the site, such as the San Pablo Fault, are not considered to pose a seismic threat to the inhabitants of California.

#### *Settlement*

The geologically young Bay Muds and fill materials on the NFD Point Molate property are relatively uncompacted, which may lead to consolidation and settlement. The maximum amount of consolidation of Bay Mud and fill depends on the density and thickness of the materials. Bay Mud 10 to 30 feet (3 to 9 m) thick beneath 10 to 20 feet (3 to 6 m) of sand fill is expected to settle on the order of 1.5 to 5 feet (0.5 to 1.5 m). The rate of settlement is most rapid immediately after loading and gradually decreases with time. It has been estimated that a 10-foot (3-m) thick Bay Mud layer would achieve maximum consolidation within 2 years (Lee and Praszker 1969).

Differential settlement (settlement that occurs to a greater degree in one area than another) results from spatial variations in thickness of unconsolidated materials such as Bay Mud or fill. The shoreline areas at the NFD Point Molate property are susceptible to differential settlement because the Bay Mud and historical tidal flat deposits thicken from east to west.

#### *Liquefaction Potential*

Liquefaction of soil results from the transformation of loose, water-saturated, granular material from a solid state to a liquefied state due to the increase in pore water pressure during an earthquake. Lateral spreading, or ground lurching, is the horizontal

component of soil movement in the direction of a free face that results from the liquefaction of a supporting layer.

The fill and unconsolidated alluvial materials along the western shoreline of the NFD Point Molate property are susceptible to liquefaction and lateral spreading, because these materials overlie unconsolidated Bay Mud, and groundwater is shallow (see Section 3.7, Water Resources).

#### *Tsunamis*

Tsunamis are seismically induced waves in coastal areas caused by an earthquake. There is a relatively low probability that a tsunami would occur at the NFD Point Molate property. Runup caused by a tsunami would be small and would remain shoreward of proposed structures.

Although tsunamis are generated in many areas around the Pacific Rim, only an earthquake in Alaska's Aleutian Trench could generate tsunamis capable of causing major runups in northern California. The theoretical 100-year runup from an Alaskan earthquake was calculated to be 7.0 feet (2 m) at the Golden Gate and half of this value within the Bay (approximately 3.5 feet [1 m]) (Garcia and Houston 1975). Therefore, runup at the NFD Point Molate property due to a major earthquake in the Aleutian Islands is expected to be minor, and this expectation is consistent with the experience from the Great Alaska Earthquake of 1964, when substantial damage was reported only along the unprotected Pacific shoreline at Crescent City, California (300 miles [480 km] north of NFD Point Molate).

#### **3.8.6 Plans and Policies**

The plans and policies discussed below are relevant to the disposal and reuse of the NFD Point Molate property.

##### *State*

#### **Evaluating and Mitigating Seismic Hazards**

The California Division of Mines and Geology (CDMG) sets guidelines for evaluating seismic hazards other than surface fault-rupture and for recommending mitigation measures as required by Cal. Pub. Res. Code Section 2695(a) (West Supp. 1999). The guidelines include items to consider in the site investigation study, quantitative evaluation of hazard potential, content of reports, estimation of earthquake ground-motion parameters, analysis and mitigation of earthquake-induced landslide hazards, analysis and mitigation of liquefaction hazards, and required certifications for geologists and engineers performing and reviewing work. Reports are required by the City through its building permit process (discussed below).

### **Alquist-Priolo Earthquake Fault Zoning Act**

The Alquist-Priolo Earthquake Fault Zoning Act, Cal. Pub. Res. Code Sections 2621-2624 (West Supp. 1999) delineates "special studies zones" along known active faults in California. Cities and counties affected by these zones are required to regulate certain development projects within the zones. Cities must withhold development permits for sites within the zones until geologic investigations demonstrate that the sites are not threatened by surface displacement from future faulting.

### **Local**

#### **City of Richmond Grading Ordinance**

The City's Excavation, Grading and Earthwork Construction Ordinance Number 19-97 establishes minimum standards and requirements for grading, excavation, and fill, and identifies procedures by which the standards and requirements are enforced. The provisions of the ordinance are supplementary and in addition to the zoning and subdivision regulations of the City. The ordinance is implemented through the City's permitting process, which requires adherence to grading and seismic safety requirements in the UBC (International Conference of Building Officials 1997).

#### **Safety Element of the City of Richmond General Plan**

Section 65302(g) of the California Government Code requires that each city's general plan include a safety element for the protection of the community from unreasonable risks associated with the effects of seismically induced surface rupture, ground shaking, ground failure, and tsunamis; slope instability leading to mudslides and landslides; and subsidence. The City's General Plan Safety Element was adopted to meet this requirement and includes the goals, policies, and implementation programs to meet state guidelines (CDMG 1973) for minimizing the potential impact of geologic hazards on newly constructed structures.

Many of the programs, such as geological investigations and special studies zone setbacks, are either required by law (Alquist-Priolo Earthquake Fault Zoning Act and Division 2 of the Cal. Pub. Res. Code, for example) or contained in the UBC, which has been adopted by reference in City Zoning Ordinance Number 19-97, discussed above. The UBC contains standards for grading, excavation, foundation design, and earthquake design. Other programs provide additional measures of safety, such as requirements for detailed structural investigations of municipal buildings and strengthening for unreinforced masonry buildings.

Seismic safety in new construction is implemented through the building permit process. All buildings for human occupancy must be built to meet the minimum requirements of the UBC, including the seismic safety elements. The City is implementing requirements

181 for seismic upgrading of existing commercial buildings. The seismic safety program is  
182 voluntary as of August 1999.

### 3.9 TRANSPORTATION, TRAFFIC, AND CIRCULATION

This section describes vehicular traffic, including trucks, transit bus service, goods movement, bicycle and pedestrian facilities, and marine transportation facilities in the ROI of the NFD Point Molate property. The ROI for transportation, traffic, and circulation is the San Pablo Peninsula, south to I-580, and east to Canal Boulevard (Figure 3.9-1).

#### 3.9.1 Existing Transportation System

##### *NFD Point Molate Roadways*

Western Drive is a public road that bisects the NFD Point Molate property and provides primary access to all buildings (Figure 3.9-2). There is parking immediately adjacent to most buildings. Another local access point is a driveway near the main gate that serves a shoreline park maintained by the City. Access to the NFD Point Molate pier from Western Drive is via Pond Road to Burma Road from the Buildings 1 and 6 area; via Diesel Road to Burma Road from the maintenance and housing areas; and via Burma Road from the main gate.

##### *San Pablo Peninsula Roadways*

Western Drive is the only roadway that serves the San Pablo Peninsula. Western Drive is a two-lane paved roadway varying in width from about 36 feet (11 m) to 20 feet (6 m). Because the road is so narrow, a centerline is not striped. Western Drive runs along the west side of the peninsula for about 3 miles (5 km) and continues about 1 mile (1.6 km) on the east side.

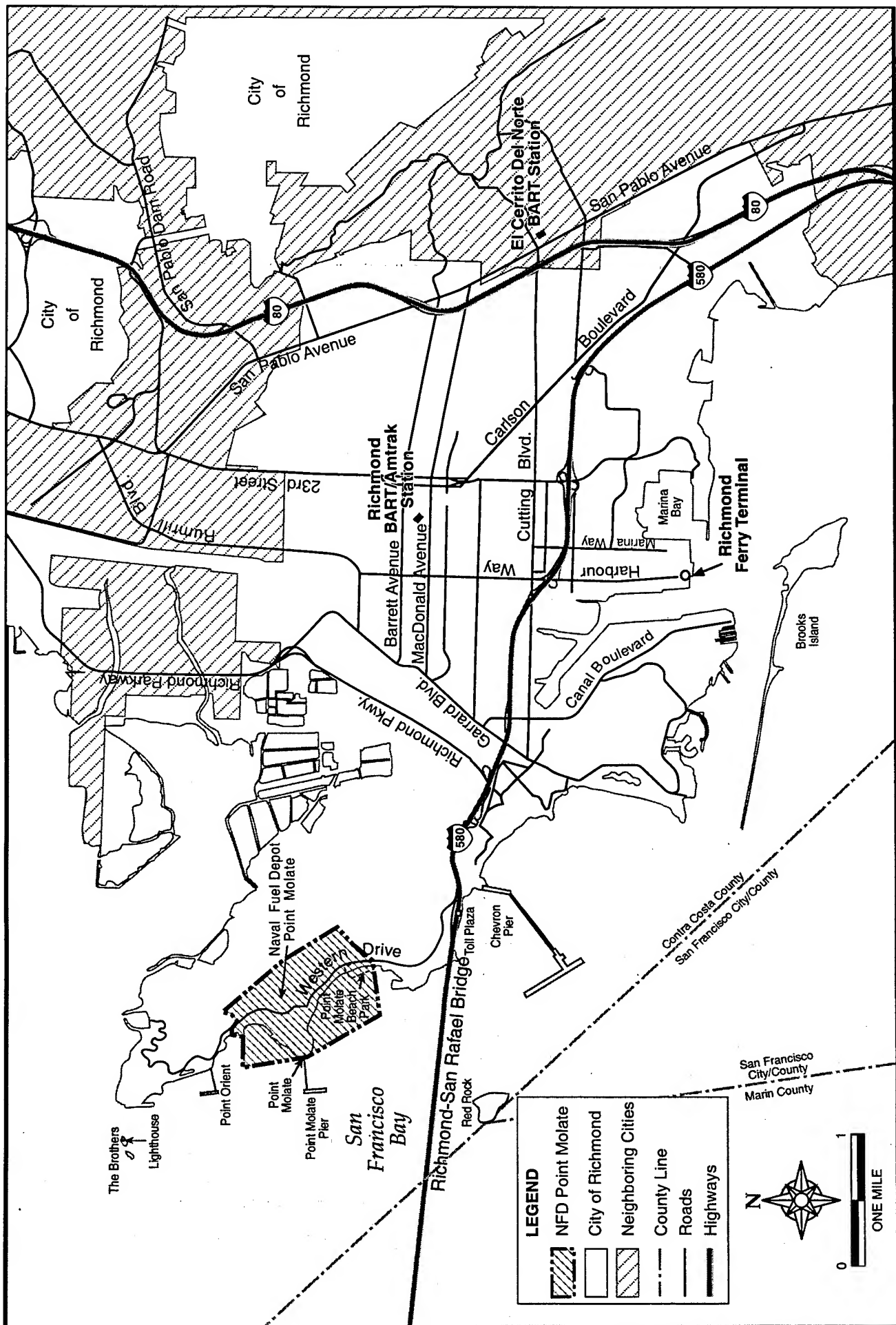
To the south of the NFD Point Molate property, Western Drive provides direct access to Caltrans' maintenance station and indirect access to the Dutra Materials Quarry and the Red Rock Cove site. To the north of the NFD Point Molate property, Western Drive provides direct access to Chevron's pistol and rifle range and the Point San Pablo Yacht Harbor, where the road terminates (Figure 3.9-3). The road provides indirect access to Chevron's Rod and Gun Club (via Drowley Drive) and the Port of Richmond's Terminal No. 4. These properties generate automobile, truck, and tank-trailer traffic. The road can be difficult for large trucks because of several narrow sections with steep grades and blind spots.

##### *Regional Roadways*

##### *Interstate 580*

The only freeway access to NFD Point Molate is via westbound I-580. I-580 begins in San Joaquin County at a junction with Interstate 5, passes through Bay Area cities including Livermore, Pleasanton, Oakland, Berkeley and Richmond, and ends at a junction with U.S. Highway 101 in Marin County. I-580 becomes the Richmond-San





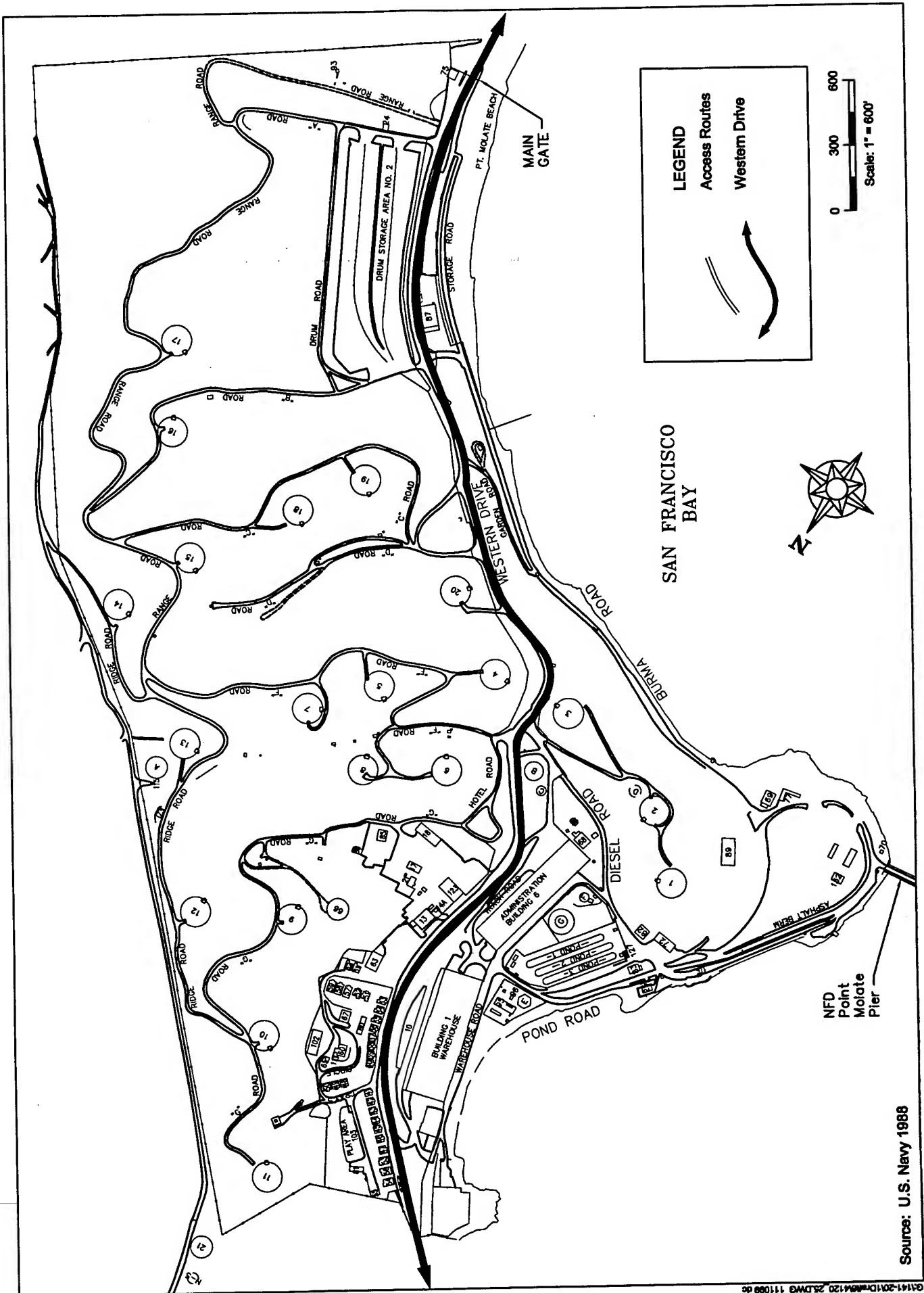
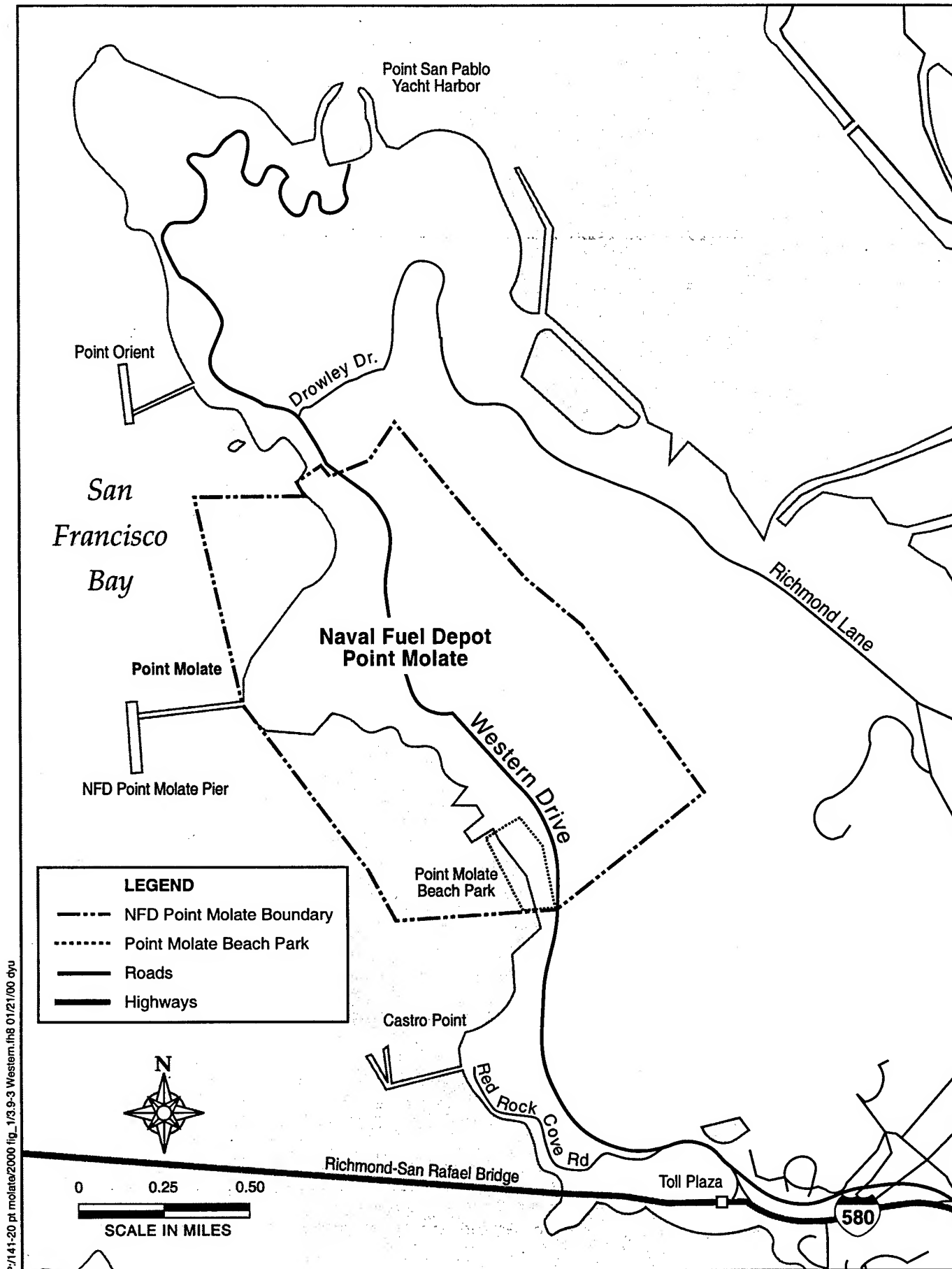


Figure 3.9-2: NFD Point Molate Access Routes

Source: U.S. Navy 1988



P:\141-20 pt molate\2000 fig\_1\3-9-3 Western.lh8 01/21/00 dxy

Figure 3.9-3: Western Drive, San Pablo Peninsula

Rafael Bridge just west of Western Drive at the bridge toll plaza. I-580 connects to Marin County across the Bay.

Near Western Drive, I-580 has three lanes for westbound traffic. There are two lanes for eastbound traffic leaving the Richmond-San Rafael Bridge; the eastbound on-ramp from Western Drive becomes a third eastbound lane east of the interchange. The toll plaza for the Richmond-San Rafael Bridge is located just west of Western Drive.

Access to San Pablo Peninsula from westbound I-580 is via a direct off-ramp at Western Drive. Access from the peninsula to eastbound and westbound I-580 is via direct on-ramps at Western Drive (Figure 3.9-4).

There is no direct ramp for traffic traveling eastbound from Marin County onto Western Drive; access is via the Richmond Parkway exit at Marine Street. After exiting at Richmond Parkway, one drives 0.25 miles (0.4 km) east, paralleling I-580, crosses under the freeway at the Richmond Parkway, and re-enters I-580 westbound from on-ramps off the Richmond Parkway. One then travels west for approximately 1.5 miles (2.4 km) to the Western Drive exit.

#### **Marine Street**

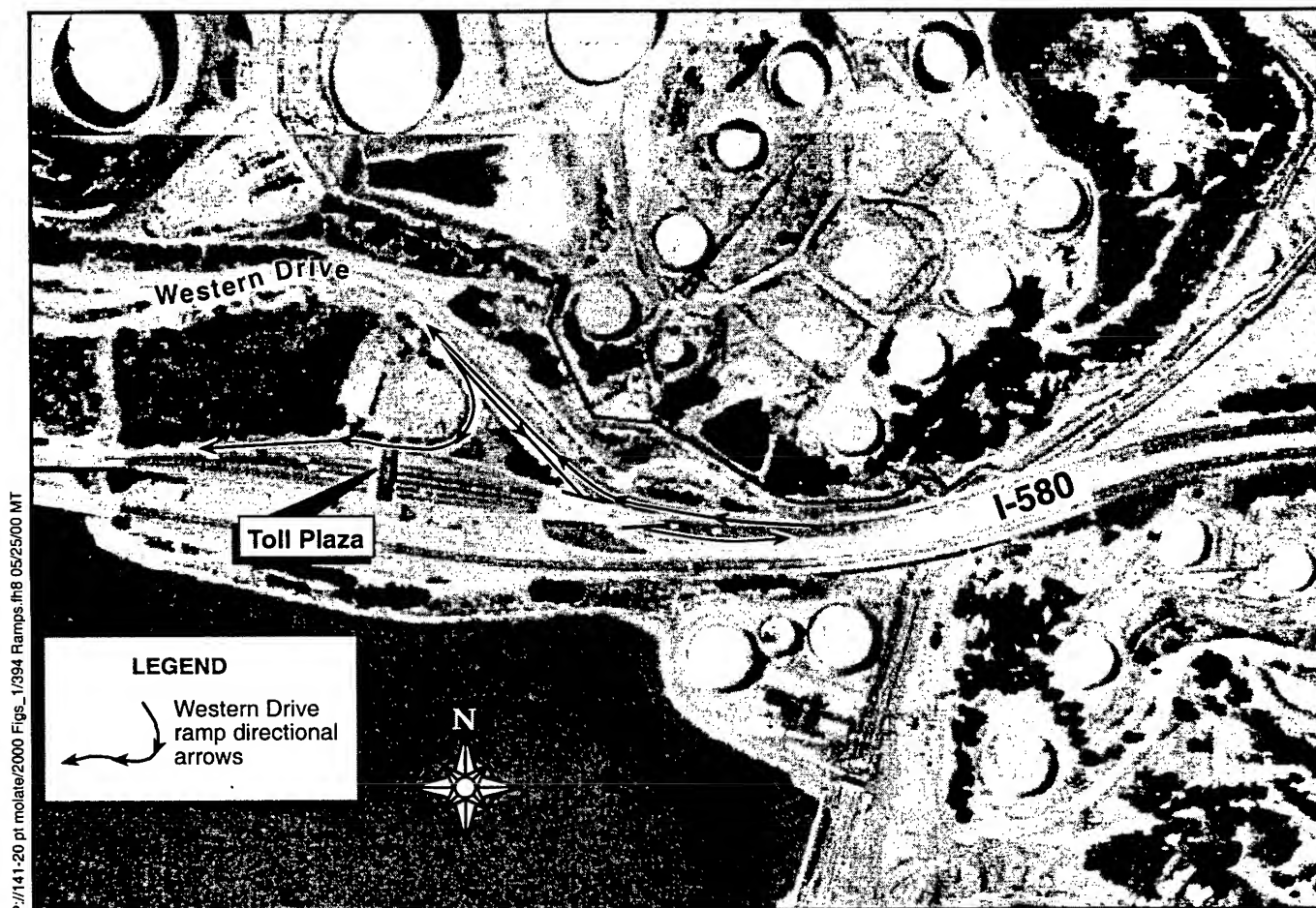
Marine Street connects the Chevron Refinery to I-580 only. It is a two-lane street with a center divider and parking on both sides of the street. The street extends from the end of the eastbound off-ramp on the south side of I-580 (the Richmond Parkway exit), passes under I-580, and ends at Chevron's manned entrance booth and gate just north of I-580.

#### **Richmond Parkway**

The Richmond Parkway, the southern portion of which is Castro Street, is an expressway with two lanes of traffic in each direction and left-turn lanes at all critical intersections. The Richmond Parkway has the major functions of serving the large Richmond industrial areas and carrying traffic between I-580 and Interstate 80 (I-80) in the north portion of Richmond and San Pablo.

The Richmond Parkway extends from the I-580 eastbound off-ramp, which parallels the freeway for about 0.5 miles (0.8 km), merges with traffic on Castro Street, crosses under I-580, and then heads north. It is to the north of the I-580 freeway that the roadway is designated the Richmond Parkway. To the south of the freeway, the roadway is designated Castro Street and is a local road that provides access to Point Richmond.

There are two signalized intersections at the Richmond Parkway and I-580 exit/entrance ramps. North of I-580, there is a standard four-leg signalized intersection. The signals control the Richmond Parkway and the westbound off-ramp. Under the I-580



Source: USGS 1993b

Figure 3.9-4: Point Molate/Western Drive Ramps at I-580

freeway, there is a signalized intersection with signals controlling traffic from the Richmond Parkway eastbound off-ramp and traffic on the Richmond Parkway (to the north) and Castro Street (to the south). This is a non-standard intersection in that not all traffic movements are controlled. The eastbound I-580 off-ramp is controlled by the signal, including the left turn onto northbound Richmond Parkway. However, the movement from southbound Richmond Parkway to the eastbound I-580 on-ramp is allowed to flow freely across the intersection, except when a pedestrian needs to cross. The northbound through movement from Castro Street to the Richmond Parkway is also allowed to flow freely via a median-separated exclusive lane.

#### **Garrard Boulevard**

Garrard Boulevard connects Cutting Boulevard to Barrett Avenue (Figure 3.9-1). This four-lane arterial street has no direct connection with I-580 but funnels largely industrial traffic around a large railroad yard. The connection between I-580 and Garrard Boulevard is via Canal Boulevard.

#### **Canal Boulevard**

Canal Boulevard is a four-lane arterial street that connects I-580 to Garrard Boulevard to the north (Figure 3.9-1). To the south, at the Port of Richmond Shipyard No. 3, Canal Boulevard is closed and gated. The City plans to extend Canal Boulevard around the southern tip of the peninsula to connect with Brickyard Cove Road.

### **3.9.2 Existing Traffic Conditions**

Existing traffic conditions consist of traffic volumes and associated Level of Service (LOS) for signalized intersections, freeway ramps, and freeway segments. The selection of intersections, freeway ramps, and freeway segments for analysis was based on existing traffic patterns and the potential of the reuse alternatives to affect those patterns. Existing traffic conditions for Western Drive were evaluated by traffic counts at and near the NFD Point Molate property (U.S. Navy 1998d).

#### ***Traffic Volumes and Level of Service***

Traffic operating conditions are evaluated on the basis of traffic volumes and the concept of LOS. Intersection LOS ranges from A (which indicates free flow, or excellent conditions with short delays) to F (which indicates congested, or overloaded, conditions with extremely long delays). LOSs A, B, C, and D are considered satisfactory service levels; LOS E is considered undesirable; and LOS F conditions are considered unacceptable.

LOS for existing conditions is separated into three parts:

1. For six intersections in the ROI:

- I-580 at Canal Boulevard (2 intersections)
- I-580 at the Richmond Parkway (Castro Street) (2 intersections)
- I-580 at Marine Street
- I-580 at Western Drive

2. For freeway ramps that provide access on and off I-580 to local surface streets:

- Western Drive
- Richmond Parkway
- Canal Boulevard

3. For five freeway segments on I-580 between Cutting Boulevard and the Richmond-San Rafael Bridge:

- West of Western Drive
- Between Western Drive and Marine Street
- Between Marine Street and the Richmond Parkway
- Between Richmond Parkway and Canal Boulevard
- East of Canal Boulevard

Figures 3.9-5 and 3.9-6 show existing lane configurations for signalized intersections and freeway mainline segments, respectively. The number of lanes is the primary key in determining the available capacity of each intersection approach, freeway ramp, or freeway lane, and they are a major determining factor in the computation of LOS.

Figure 3.9-7 presents existing A.M. and P.M. traffic volumes at the intersections and on the freeway segments. The freeway segment traffic counts on I-580 west of Western Drive were obtained from Caltrans. East of Western Drive, the freeway mainline volumes were derived from ramp counts and the freeway counts west of Western Drive. Traffic counts were also taken where I-580 discharges onto Western Drive, at a location where there are no cross-streets.

#### *Intersection Service Levels*

Existing conditions for intersections were assessed using the Contra Costa Transportation Authority (CCTA) LOS program; this program is a required analysis tool for projects analyzed by agencies under the jurisdiction of the CCTA. Upon disposal from Federal ownership, NFD Point Molate would be under the jurisdiction of the CCTA.

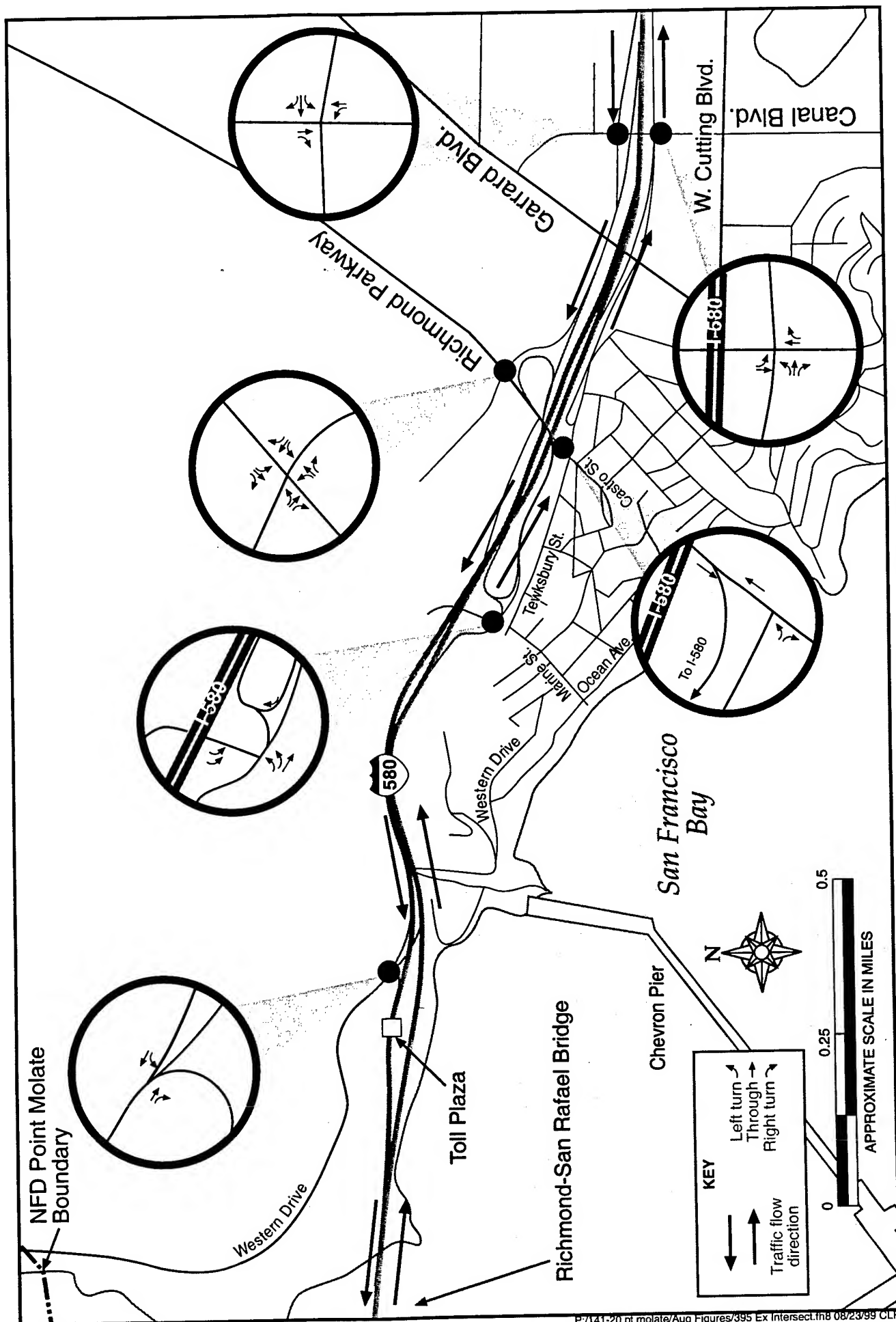


Figure 3.9-5: Existing Intersection Configurations



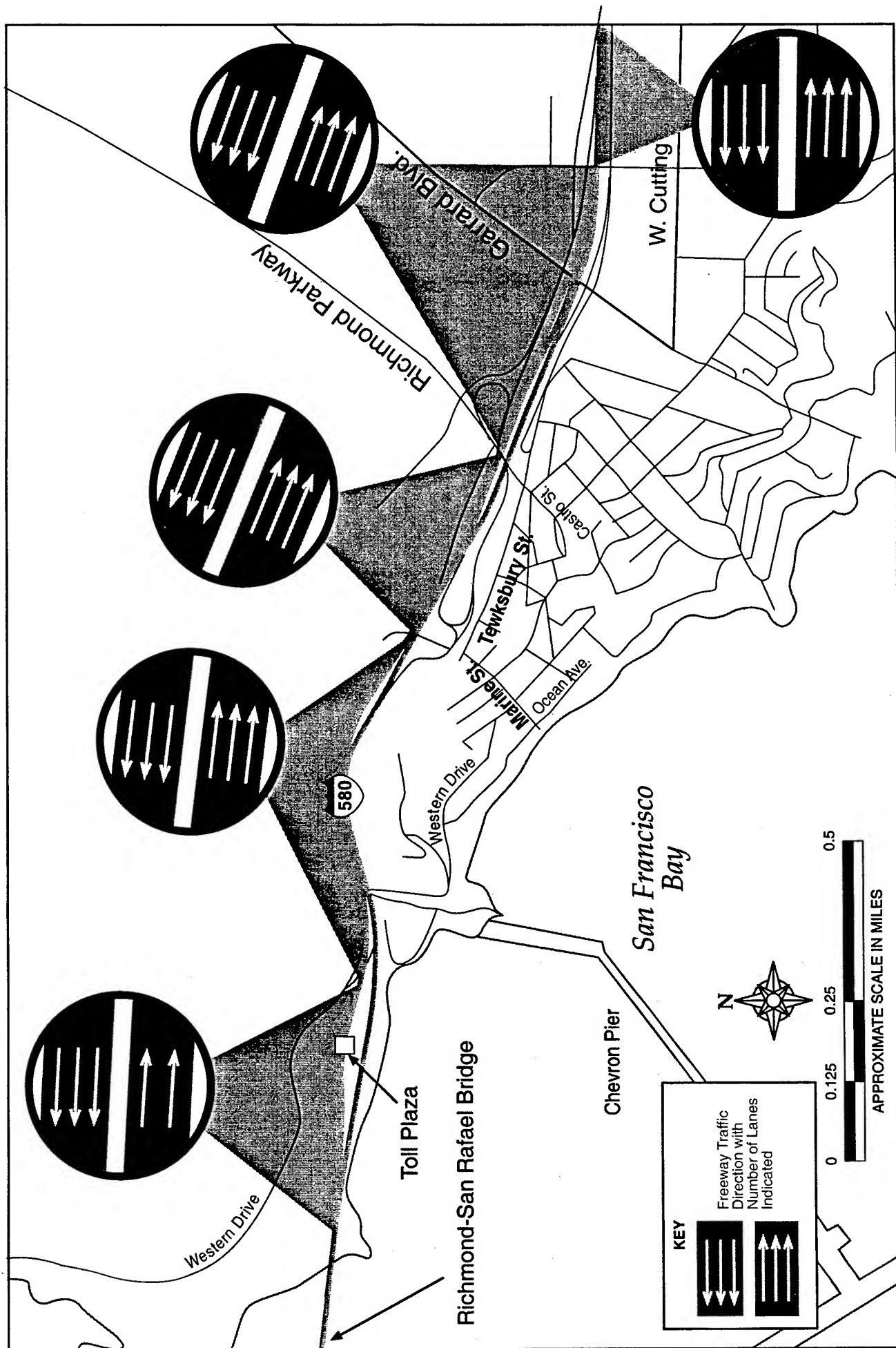


Figure 3.9-6: Existing Freeway Mainline Segments

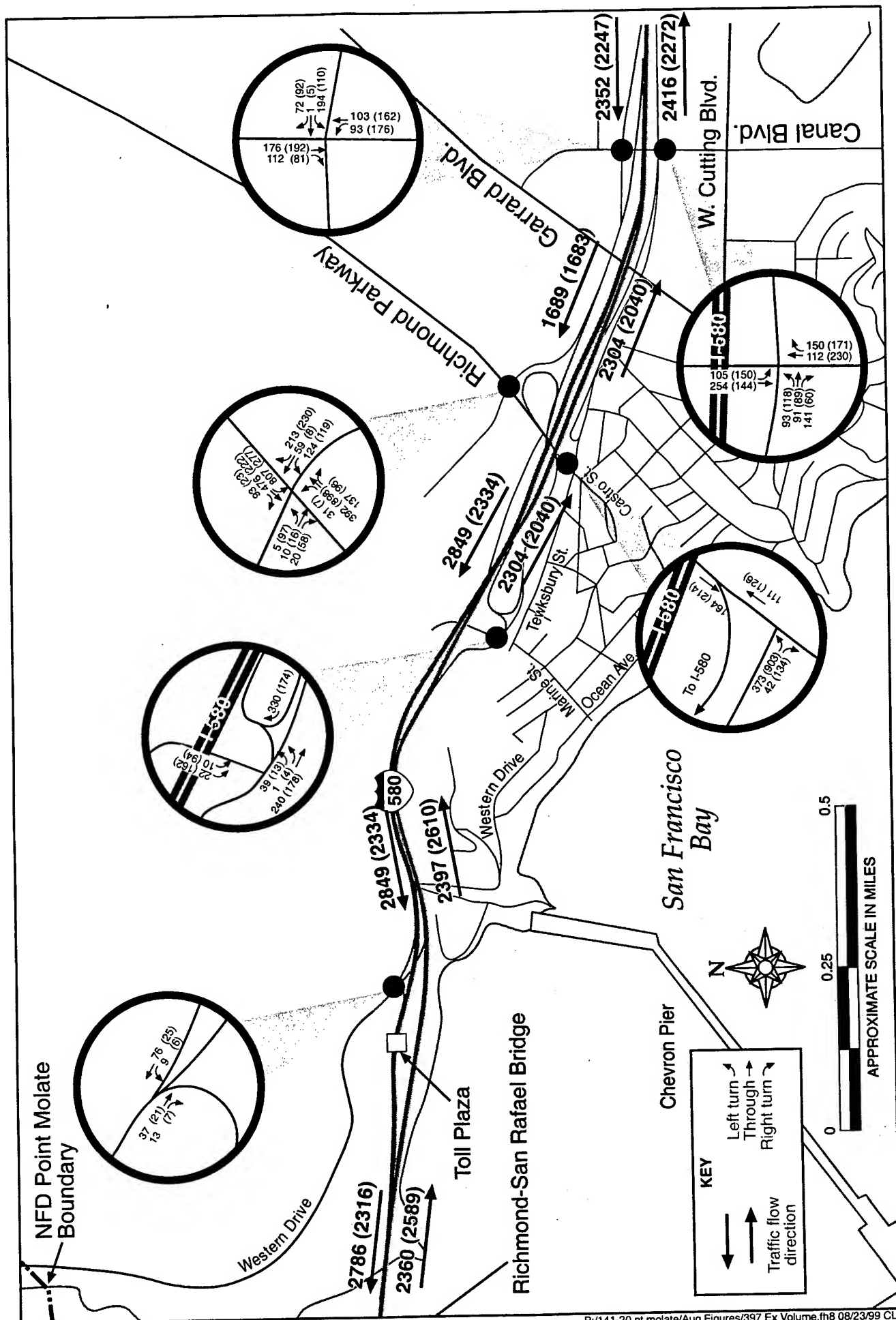


Figure 3.9-7: Existing Traffic Volumes (AM/PM)

The CCTA LOS program involves computing a "volume-to-capacity (v/c) ratio" in which the volumes are the traffic for each approach into the intersection, and the capacities are determined by the number of through and turning lanes for each approach. The phasing of each traffic signal is also an internal component of the computation. There is a direct relationship between the v/c ratio and the service level. Each service level is defined in terms of a range of v/c ratios, as shown in Table 3.9-1. All intersection evaluations involve the computation of a v/c ratio and a translation into LOS based on Table 3.9-1.

**TABLE 3.9-1**  
**CCTA LOS CRITERIA FOR SIGNALIZED INTERSECTIONS**

LEVEL OF SERVICE	SUM OF CRITICAL VOLUME-TO-CAPACITY RATIOS
A	0.60
B	0.61 to 0.70
C	0.71 to 0.80
D	0.81 to 0.90
E	0.91 to 1.00
F	> 1.00

Source: U.S. Navy 1998d.

Table 3.9-2 presents the existing A.M. and P.M. LOS for the five intersections and the location at which I-580 discharges onto Western Drive, based on the CCTA LOS criteria shown in Table 3.9-1. Under existing conditions, the intersection of the I-580 westbound ramp at the Richmond Parkway operates at LOS B during the A.M. peak hour and LOS A during the P.M. peak hour. All other study intersections operate at LOS A during both the A.M. and P.M. peak hours.

**TABLE 3.9-2**  
**EXISTING VOLUME-TO-CAPACITY RATIOS AND LOS**  
**AT INTERSECTIONS**

INTERSECTION	A.M. PEAK HOUR		P.M. PEAK HOUR	
	V/C	LOS	V/C	LOS
I-580 WB / Canal Boulevard	0.23	A	0.22	A
I-580 EB / Canal Boulevard	0.20	A	0.24	A
I-580 WB / Richmond Parkway	0.67	B	0.54	A
I-580 EB / Richmond Parkway	0.25	A	0.56	A
I-580 EB / Marine Street	0.23	A	0.54	A
I-580 / Western Drive	0.08	A	0.03	A

Source: U.S. Navy 1998d.

EB = eastbound. WB = westbound. v/c = volume-to-capacity ratio.

**Freeway Interchanges**

The Federal Highway Capacity Manual (HCM) methodology was used to calculate the LOS for I-580 ramps that could be affected by proposed reuse of NFD Point Molate. The following ramps were analyzed:

- Western Drive
- Richmond Parkway
- Canal Boulevard

LOS criteria for freeway interchanges are based on a maximum ramp density, which is the number of passenger cars per mile per lane (pc/mi/lane), calculated at the merge point for on-ramps and the diverge point for off-ramps. The maximum densities for freeway ramps and corresponding LOS established by the HCM are shown in Table 3.9-3.

**TABLE 3.9-3  
LOS CRITERIA FOR FREEWAY RAMPS**

LEVEL OF SERVICE	MAXIMUM DENSITY (PC/MI/LANE)
A	10
B	20
C	28
D	35
E	>35
F	Demand flows exceed limits

Source: U.S. Navy 1998d.

pc/mi/lane = passenger cars per mile per lane.

In addition to ramp density measurements, the v/c ratio of ramps was measured to account for possible distortion in ramp density measurements, which can be affected by adjacent freeway congestion. Table 3.9-4 shows peak hour LOS based on ramp density, v/c ratios, and vehicles per hour.

TABLE 3.9-4  
EXISTING RAMP DENSITY AND LOS ON FREEWAY INTERCHANGE RAMPS

INTERCHANGES	RAMP	A.M. PEAK HOUR				P.M. PEAK HOUR			
		MERGE/DIVERGE				MERGE/DIVERGE			
		RAMP DENSITY (PC/MI/LANE)	LOS	RAMP V/C	VPH	RAMP DENSITY (PC/MI/LANE)	LOS	RAMP V/C	VPH
Western Drive	EB On	17.92	B	0.02	37	19.58	B	0.01	21
	WB On	12.45	B	0.01	22	10.19	B	0.01	13
	WB Off	14.40	B	0.06	85	11.21	B	0.02	31
Richmond Parkway	EB On	11.34	B	0.23	341	9.84	A	0.18	272
	EB Off	12.43	B	0.29	434	14.68	B	0.56	842
	WB On	16.92	B	0.77	1,160	12.61	B	0.43	651
	WB Off	10.43	B	0.26	396	10.06	B	0.24	357
Canal Boulevard	EB On	11.89	B	0.23	346	11.44	B	0.27	410
	EB Off	11.43	B	0.16	234	9.67	A	0.12	178
	WB Off	11.79	B	0.18	267	11.02	B	0.14	207

Source: U.S. Navy 1998d.

pc/mi/lane = passenger cars per mile per lane. EB = eastbound. WB = westbound. LOS = Level of Service.

VPH = vehicles per hour.

#### *Freeway Mainline Volumes and Service Levels*

Existing operations for freeway segments were estimated based on the methodology described in the 1994 HCM. LOS criteria for freeway segments are defined on the basis of a formal term known as passenger cars per hour per lane (pcphpl). This term is intended to account for variations in the mix of vehicle types (cars, trucks, buses, recreational vehicles, etc.) as well as features such as roadway incline (grade) and related features. There are standard factors within the HCM that allow daily traffic counts to be converted to pcphpl, and these were included in all freeway computations. As with intersections, there is a relationship between this measure and LOS. Table 3.9-5 shows this relationship.

**TABLE 3.9-5**  
**LOS CRITERIA FOR FREEWAY SEGMENTS**

LEVEL OF SERVICE	MAXIMUM SERVICE FLOW RATE VOLUME (pcphpl)
A	650
B	1,040
C	1,548
D	1,952
E	2,200/2,300*
F	Variable

Source: U.S. Navy 1998d.

pcphpl = passenger cars per hour per lane.

\*The first value is for four-lane freeways, and the second is for six- and eight-lane freeways.

I-580 in the NFD Point Molate ROI has one of the best service levels of any freeway in the Bay Area. Table 3.9-6 shows the A.M. and P.M. peak hour volumes and service levels. Under existing conditions, all the freeway segments operate at LOS C or better during both the A.M. and P.M. peak hours.

**TABLE 3.9-6**  
**EXISTING TRAFFIC VOLUMES AND LOS ON FREEWAY SEGMENTS**

SEGMENT AND DIRECTION		A.M. PEAK HOUR		P.M. PEAK HOUR	
		VOLUME (pcphpl)	LOS	VOLUME (pcphpl)	LOS
West of Western Drive	EB	1,349	C	1,480	C
	WB	1,062	C	882	B
Between Western Drive and Marine Street	EB	913	B	995	B
	WB	1,086	C	889	B
Between Marine Street and Richmond Parkway	EB	878	B	777	B
	WB	1,086	C	889	B
Between Richmond Parkway and Canal Boulevard	EB	878	B	777	B
	WB	644	A	641	A
East of Canal Boulevard	EB	921	B	866	B
	WB	896	B	856	B

Source: U.S. Navy 1998d.

pcphpl = passenger cars per hour per lane. EB = eastbound. WB = westbound.

LOS = Level of Service.

### *Traffic Volumes on Western Drive*

Table 3.9-7 summarizes daily traffic vehicle classification counts conducted at the northern and southern ends of the NFD Point Molate property. Traffic consists of 60 percent cars, 38 percent trucks, and 2 percent bikes. Approximately 75 percent of the cars and trucks recorded at the main gate at NFD Point Molate (372 trips) are through-trips to destinations north.

When NFD Point Molate was an active fuel depot, Navy staff contributed about eight vehicle trips per day to the traffic on Western Drive.

**TABLE 3.9-7**  
**AVERAGE DAILY TRAFFIC VOLUMES ON WESTERN DRIVE**

LOCATION	NORTHBOUND			SOUTHBOUND			TOTAL		
	CARS	TRUCKS	BIKES	CARS	TRUCKS	BIKES	CARS	TRUCKS	BIKES
Main Gate	148	100	4	154	93	4	302	193	8
Northern end of property	140	77	3	88	62	7	228	139	10
Total	288	177	7	242	155	11	530	332	18
Percent of Total Vehicles	61%	38%	1%	59%	38%	3%	60%	38%	2%

Source: U.S. Navy 1998d.

### **3.9.3 Future Baseline Traffic Conditions**

Future baseline traffic conditions consist of traffic volumes and LOS for signalized intersections, freeway ramps, and freeway segments for the year 2020 without reuse of NFD Point Molate. Future baseline traffic conditions were estimated for 2020 based on the methodology used for estimating existing conditions, combined with CCTA Travel Demand Model forecasts and ABAG demographic projections.

#### ***Intersections***

As shown in Table 3.9-8, in the A.M. peak hour, four intersections would operate at LOS A, and one intersection would operate at LOS C. This is similar to existing conditions (Table 3.9-2), except that the I-580 westbound/Richmond Parkway intersection, which currently operates at LOS B, would degrade to LOS C in 2020. In the P.M. peak hour, two intersections would continue to operate at LOS A, and three intersections would degrade from LOS A to LOS B in 2020.

**TABLE 3.9-8**  
**FUTURE 2020 BASELINE INTERSECTION CONDITIONS**

SIGNALIZED INTERSECTIONS	A.M. PEAK		P.M. PEAK	
	V/C	LOS	V/C	LOS
I-580 WB/Canal Boulevard	0.27	A	0.27	A
I-580 EB/Canal Boulevard	0.23	A	0.29	A
I-580 WB/Richmond Parkway	0.80	C	0.66	B
I-580 EB/Richmond Parkway	0.30	A	0.68	B
I-580 EB/Marine Street	0.27	A	0.66	B

Source: U.S. Navy 1998d.

v/c = volume to capacity

LOS = Level of Service

EB = eastbound

WB = westbound

### **Freeway Ramps**

As shown in Table 3.9-9, freeway ramps would operate adequately at LOS B or C during the A.M. and P.M. peak hours. In the A.M. peak hour, two freeway ramps (Western Drive eastbound on and Richmond Parkway westbound on) would degrade from their current LOS B (Table 3.9-4) to LOS C. In the P.M. peak hour, two freeway ramps (Richmond Parkway eastbound on and Canal Boulevard eastbound off) would degrade from their current LOS A to LOS B. In addition, Western Drive eastbound on would change from LOS B to LOS C in 2020.

**TABLE 3.9-9**  
**FUTURE 2020 BASELINE RAMP CONDITIONS**

FREEWAY RAMPS		A.M. PEAK		P.M. PEAK	
		VPH	LOS	VPH	LOS
Western Drive	EB on	44	C	26	C
	WB on	26	B	16	B
	WB off	101	B	38	B
Richmond Parkway	EB on	406	B	332	B
	EB off	517	B	1,027	B
	WB on	1,382	C	794	B
Canal Boulevard	WB off	472	B	436	B
	EB on	412	B	500	B
	EB off	279	B	217	B
	WB off	318	B	253	B

Source: U.S. Navy 1998d.

VPH = vehicles per hour

LOS = Level of Service

EB = eastbound

WB = westbound



### Freeway Segments

Future baseline traffic conditions (without reuse of NFD Point Molate) for freeway segments in 2020 are shown in Table 3.9-10. All but one of the freeway segments would operate at LOS B or C. The segment west of Western Drive in the eastbound direction would operate at LOS D in both the A.M. and P.M. peak hours.

In the A.M. peak hour, five of the segments would degrade from LOS B (Table 3.9-6) to C. One segment (between Richmond Parkway and Canal Boulevard in the westbound direction) would degrade from LOS A to B in both A.M. and P.M. peak hours. West of Western Drive in the eastbound direction would degrade from LOS C to D in both the A.M. and P.M. peak hours. In the P.M. peak hour, six segments would change from LOS B to C.

**TABLE 3.9-10**  
**FUTURE 2020 BASELINE FREEWAY SEGMENT CONDITIONS**

FREEWAY MAINLINE SEGMENT		A.M. PEAK		P.M. PEAK	
		VOLUME (pcphpl)	LOS	VOLUME (pcphpl)	LOS
West of Western Drive	EB	1,607	D	1,805	D
	WB	1,264	C	1,077	C
Between Western Drive and Marine Street	EB	1,088	C	1,214	C
	WB	1,293	C	1,085	C
Between Marine Street and Richmond Parkway	EB	1,046	C	948	B
	WB	1,293	C	1,085	C
Between Richmond Parkway and Canal Boulevard	EB	1,046	C	948	B
	WB	767	B	782	B
East of Canal Boulevard	EB	1,097	C	1,056	C
	WB	1,068	C	1,045	C

Source: U.S. Navy 1998d.

pcphpl = passenger cars per hour per lane

LOS = Level of Service

EB = eastbound

WB = westbound

### 3.9.4 Other Transportation Modes

#### Public Transit

There is no public transit service to the NFD Point Molate property or the west side of the San Pablo Peninsula. Two public transit agencies provide service on three different routes in the vicinity of NFD Point Molate (Figure 3.9-8). Alameda-Contra Costa Transit (AC Transit) Route 73 provides service from the intersection of

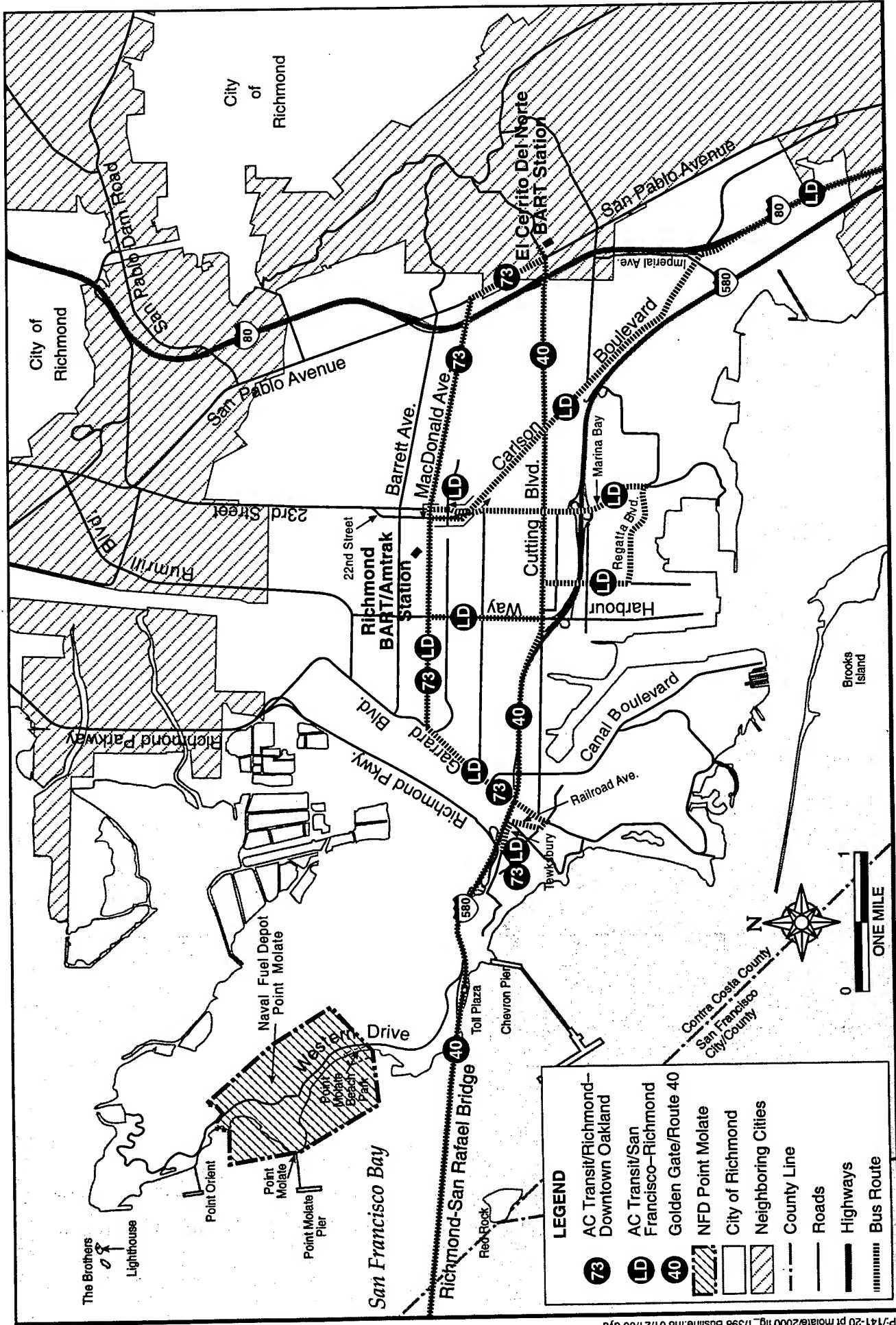


Figure 3.9-8: Transit Routes in the ROI

Tewksbury Street and the Richmond Parkway to downtown Oakland via Tewksbury Street, Garrard Boulevard, Macdonald Avenue, and San Pablo Avenue. Selected runs of Route 73 provide service into the Chevron refinery. AC Transit Route LD provides express service to San Francisco via downtown Richmond and Marina Bay. Golden Gate Transit operates Route 40 between San Rafael and the El Cerrito Del Norte Bay Area Rapid Transit (BART) station.

In addition to bus service, BART operates regional rail service from Richmond to cities in the Bay Area as distant as Colma, Fremont, Dublin, and Pittsburg. Amtrak operates inter-city passenger rail service, with a station at the Richmond BART station.

#### *Ferry Service in San Francisco Bay*

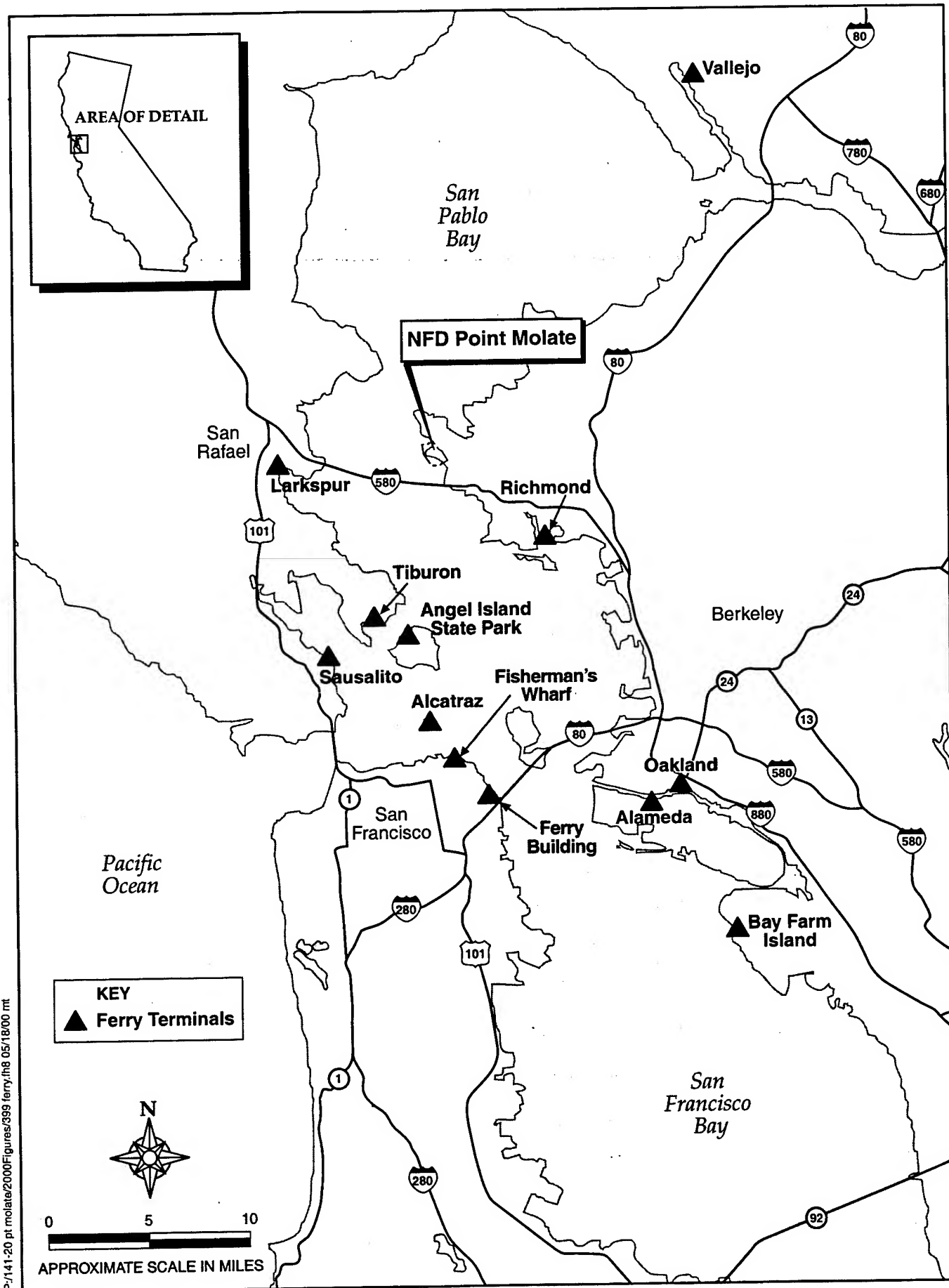
Ferry service is located in the cities of Richmond, Vallejo, Oakland, Alameda (two terminals), Larkspur, Tiburon, Sausalito, and San Francisco (two terminals) (Figure 3.9-9). The Richmond Ferry Terminal is located at the south end of Harbor Way at Marina Bay (Figure 3.9-1). The Red and White Fleet provides ferry service between the Richmond Ferry Terminal, San Francisco Ferry building, and Fisherman's Wharf Pier 43 ½. The MTC has studied ferry service locations in Hercules and Berkeley (U.S. Navy 1998e).

Ferry services and other water-based public transportation modes on the Bay tend to need residential concentrations at the end of a route not located in San Francisco. The driving force behind the success of ferries serving San Francisco is the high density of commercial and tourist activities in San Francisco, combined with competitive commuter times.

The nearest ferry terminal to the NFD Point Molate property is located in Larkspur in Marin County. All of the ferry services are subsidized by bridge tolls. Service to Oakland and Alameda is subsidized by tolls on the Bay Bridge, Hayward/San Mateo, Dumbarton, and Richmond-San Rafael bridges. Service from Larkspur is subsidized by tolls collected on the Golden Gate Bridge.

Ferry service has been used in emergency circumstances. When the 1989 Loma Prieta earthquake damaged the Bay Bridge, removing it from operation for one month, ferries were used from Oakland, Alameda, Berkeley, and Richmond as a partial substitute for the bridge. However, after the bridge was repaired, ferry patronage was not sufficient to allow private operators to remain profitable, and the supplemental service stopped.

A water taxi service has recently begun operation in the Oakland/Alameda Estuary. The service consists of "on-demand" service primarily for commercial recreation uses or for specific events, rather than scheduled ferry service (U.S. Navy 1998e).



P:\141-20 pt.molate\2000Figures\399 ferry.in8 05/18/00 mt

Figure 3.9-9: San Francisco Bay Area Ferry Terminal Map

### *Rail*

The Burlington Northern Santa Fe Railroad provides transcontinental, long-haul freight service. The rail line originates in Richmond, on the east side of San Pablo Peninsula, at a major switching/freight yard immediately north of I-580 at Garrard Boulevard and the Richmond Parkway. The Parr Terminal Railroad is a local switching railroad that moves tank cars between Chevron and the Burlington Northern Santa Fe switching yard. The Parr Terminal Railroad also provides other switching service in the area. There are no active Navy rail lines at or in the vicinity of the NFD Point Molate property.

The nearest passenger rail station is the Richmond Intermodal station for BART and Amtrak, located in the central part of the City (see Figure 3.9-1).

### *Abandoned Rail Lines*

An extension of the Parr Terminal Railroad is a line formerly known as the Richmond Beltline Railroad. This line begins at the Chevron property near I-580, on the east side of the San Pablo Peninsula, goes north to the tip of the peninsula, and then runs south through the NFD Point Molate property and beyond. The line south of the Port of Richmond's Terminal 4 is inactive, and portions of the tracks have been removed to the north of the NFD Point Molate property.

### *Bicycle and Pedestrian Circulation*

There are no provisions for pedestrians or bicycles at the NFD Point Molate property, nor are there provisions on Western Drive or between the NFD Point Molate property reuse areas and external access points. Western Drive is very narrow in some locations and not suitable for either bicycles or pedestrians.

The nearest bicycle path in the vicinity of the NFD Point Molate property is a Class I (separate path) bicycle path that begins just northwest of the Western Drive/I-580 ramp intersection, passes under the Richmond-San Rafael Bridge, and continues southeast along the side of the freeway (Figure 3.1-11). This path is part of the Bay Trail, which is being developed to ring the Bay with a combination pedestrian/bicycle trail. This trail is described and mapped in Section 3.1, Land Use.

### *Goods Movement*

Goods movement in the vicinity of NFD Point Molate is predominantly associated with the Port of Richmond's Terminal No. 4 (located at the northern tip of the San Pablo Peninsula) and the Chevron refinery. The Port of Richmond leases Terminal No. 4 to Paktank, an importer/exporter of bulk liquids, such as vegetable oil and petroleum products, with an annual volume of roughly 56,000 to 75,000 metric tons (Port of Richmond 1999). Products are transported to and from the site either by tank-trailers

via Western Drive to I-580 or by rail via the Richmond Beltline Railroad, which runs along the east side of the peninsula through the Chevron refinery.

Less than a mile (1.6 km) north of the NFD Point Molate property is Chevron's Point Orient Pier. Chevron stopped using the pier, as well as Western Drive to transport product to the pier, several years ago. Chevron uses the Chevron Pier (Figure 1.2-2), located south of I-580 near the Richmond-San Rafael Bridge, and pipelines to transport product to and from the refinery.

Trucks accessing the west side of the San Pablo Peninsula use the Richmond Parkway intersection, then double back 0.25 miles (0.4 km) to Western Drive at I-580 (Figure 3.9-1).

### 3.9.5 Plans and Policies

The plans and policies discussed below are relevant to the disposal and reuse of the NFD Point Molate property.

#### *Regional*

##### **West Contra Costa Transportation Advisory Council**

The City is part of the West Contra Costa Transportation Advisory Council (WCCTAC) and the CCTA. The WCCTAC Action Plan has adopted a transportation network for the City, referred to as "Routes of Regional Significance." The designation of this network was made for a number of policy- and fundraising-related reasons: among others, the network defines those regional routes that should be considered when development of the magnitude of the NFD Point Molate property is proposed. The Routes of Regional Significance in the ROI are I-580 and the Richmond Parkway.

The Action Plan contains Traffic Service Objectives (TSOs) for Routes of Regional Significance. For I-580, the TSO is to "attempt to achieve an average vehicle occupancy of 1.35." There is limited congestion on I-580 during peak periods, except in the southbound direction where I-580 connects to I-80 and at the Richmond-San Rafael Bridge in the westbound direction. The Action Plan anticipates that the peak hour LOS on I-580 will decrease to LOS D in some sections. LOS D is the common minimum acceptable operating standard. There are currently no TSOs for the Richmond Parkway.

For local routes, CCTA operating standards are dependent on the general land use type. The NFD Point Molate property is in an area described as "suburban" in the categories defined in the CCTA Technical Procedures. An LOS D is established for these locations.

### Association of Bay Area Governments

ABAG is a regional planning agency for the nine counties surrounding the Bay. ABAG is the lead agency for the Bay Trail Project, the goal of which is to preserve and make available land around the Bay for recreation, education, and aesthetic purposes. The Bay Trail Plan (ABAG 1998) envisions “spine trails” that encircle the Bay, “spur trails” from the spine trails to points of natural, historic, and cultural interest along the Bay shoreline, and “connector trails” to recreational opportunities, as well as residential and employment centers inland from the Bay.

In the vicinity of the NFD Point Molate property, the Bay Trail Plan designates a spur trail that would follow the western shoreline of San Pablo Peninsula around its northern tip to Point San Pablo Yacht Harbor (Figure 3.1-11). The plan identifies three classes of bicycle facilities:

- A Class I bicycle facility is defined as a path for bicycles on a separate, exclusive right-of-way. Class I paths may be designated exclusively for bicyclists or for bicyclists, pedestrians, skaters, and other pedestrian forms of transportation.
- A Class II bicycle facility is a bicycle lane. It is built on a right-of-way shared with motorized traffic.
- A Class III bicycle facility is a bicycle route. Signs are posted identifying the street or roadway as a bicycle route, but no lane markings or other traffic control devices are provided. Bicycle routes are appropriate only on low-volume urban streets.

At least three possibilities exist for extending the Bay Trail up to and possibly beyond the NFD Point Molate property:

- Concept 1—A Class I path could be constructed from the current terminus at Western Drive on a new alignment along the Bay. Such a path could pass through existing lands in low-intensity industrial/commercial use. This concept would require acquisition of non-Navy property.
- Concept 2—A Class I path could be constructed parallel to Western Drive. Such a path would most likely be possible only in conjunction with a roadway improvement project that would widen Western Drive at its current narrow 20-foot (6-m) throat. While this concept would require a right-of-way acquisition from non-Navy ownership, it would be less intrusive than Concept 1.
- Concept 3—A Class II bicycle lane could be constructed on each side of the reconstructed Western Drive. Such a bicycle lane would have the advantage of possibly requiring less land overall than Concept 2. As with all of these concepts, acquisition of non-Navy property would be required.

**Local****City of Richmond General Plan**

The Circulation and Growth Management Elements of the Richmond General Plan establish policies for future transportation development and guidelines relevant to the disposal and reuse of the NFD Point Molate property.

**Circulation Element**

- Promote access to the City's recreational areas, shoreline area, and community facilities (Policy CIR-A.5).
- Maintain a safe, effective and attractive bicycle and pedestrian circulation system, with particular emphasis on the San Francisco Bay Trail and the Bay Area Ridge Trail, and ensure that new or existing developments are interconnected (Policy CIR-B.3).
- Encourage developers through the established permit process to include mass transit facilities within their projects and require them to coordinate with mass transit agencies to provide service to their projects (Policy CIR-C.7).
- Maintain level of service standards to comply with requirements of County-wide Transportation Measure C (Policy CIR-D.3).
- Maintain level of service standards which comply with the West Contra Costa Transportation Committee's Action Plan standards for Routes of Regional Significance (Policy CIR-D.4).

The Circulation Element of the General Plan also has guidelines for shoreline areas such as the NFD Point Molate property.

- Promote more effective movement of people to and within the shoreline areas by: (1) increased public transit service linked to BART; and (2) development of convenient bicycle and foot paths (Guideline No. 1).
- Promote circulation facilities in the shoreline areas that will assist inland residents in taking advantage of the shoreline. Stress that design of these facilities should not block access to the waterfront (Guideline No. 2).
- Encourage development of a system of hiking/bike trails throughout the shoreline area as shown on Circulation Plan Map 2 (Guideline No. 5).

**Growth Management Element**

The Growth Management Element contains policies related to traffic service standards and programs. This element of the General Plan responds directly to the requirements of Measure C (Contra Costa County initiative passed by the voters in 1988), which has



472 been implemented through the WCCTAC Action Plan discussed above. The standards  
473 in the General Plan are identical to those of the WCCTAC.

474 **Thoroughfares and Bicycle Routes**

475 Volume 2, Technical Appendix of the General Plan (City of Richmond 1994b), Section F,  
476 Survey of Transportation and Circulation, identifies major and secondary thoroughfares  
477 and proposed bicycle routes of importance. It also identifies scenic routes, corridors,  
478 and landscaped freeways of importance, which are discussed in Section 3.2, Visual  
479 Resources.

480 Major Thoroughfares: Major thoroughfares in the ROI are Canal Boulevard, Cutting  
481 Boulevard, and Macdonald Avenue.

482 Secondary Thoroughfares: Secondary thoroughfares in the ROI are Western Drive and  
483 Garrard Boulevard.

484 Bicycle Routes: The west shoreline of the San Pablo Peninsula between the Richmond-  
485 San Rafael Bridge toll plaza and the Winehaven Building at NFD Point Molate is a high-  
486 priority route for a separate right-of-way bicycle route.

### 3.10 AIR QUALITY

This section describes air quality in the ROI. The ROI for air quality is the San Francisco Bay Area Air Basin. The San Francisco Bay Area Air Basin consists of nine counties (Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, southwestern Solano, and southern Sonoma). Primary air pollutants and airborne asbestos fibers are evaluated at the NFD Point Molate property. Odors are considered within a 2-mile (3-km) radius of the property, and secondary air pollutants are considered basin-wide.

The NFD Point Molate property is located in the northwest corner of the Northern Alameda-Western Contra Costa Counties Subregion of the Bay Area Air Quality Management District (BAAQMD). This area stretches 20 miles (32 km) from the Richmond area through Oakland to San Leandro. Its western boundary is the Bay, and its eastern boundary is the Oakland-Berkeley Hills, which form a significant barrier to air flow.

#### 3.10.1 Climate and Meteorology

The Bay Area has a Mediterranean-type climate, characterized by mild temperatures. The prevailing wind direction in the vicinity of the NFD Point Molate property is south to southwesterly, with over 50 percent of the winds coming from the south through southwest. The average wind speed is 11 miles per hour (mph) (18 km per hour). Richmond's maximum summer temperatures average in the low 70s, and minimum summer temperatures average in the mid-50s. Winter maximum temperatures are in the high 50s to low 60s, and minimum temperatures are in the low to mid-40s. The average annual precipitation is approximately 22 inches (56 cm).

#### 3.10.2 Ambient Air Quality Standards

Air pollutants are characterized as being "primary" or "secondary" pollutants. Primary pollutants (such as carbon monoxide, sulfur dioxide, lead particles, and hydrogen sulfide) are emitted directly into the atmosphere. Secondary pollutants (such as ozone, nitrogen dioxide, and sulfate particles) are formed through chemical reactions in the atmosphere; these chemical reactions usually involve primary pollutants, normal constituents of the atmosphere, and secondary pollutants.

Both Federal and state governments have established ambient air quality standards for several pollutants, which are referred to as criteria pollutants (Table 3.10-1). Areas that meet Federal or state air quality standards are generally categorized as "attainment" or "unclassified" areas. Areas that have recently met Federal standards are classified as "maintenance" areas. The attainment status for the Bay Area is summarized in Table 3.10-2.

**TABLE 3.10-1**  
**AMBIENT AIR QUALITY STANDARDS APPLICABLE IN CALIFORNIA**

POLLUTANT	SYMBOL	AVERAGING TIME	STANDARD AS PARTS PER MILLION (ppm) BY VOLUME		STANDARD AS MICROGRAMS PER CUBIC METER ( $\mu\text{g}/\text{m}^3$ )		VIOLATION CRITERIA	
			CALIFORNIA	NATIONAL	CALIFORNIA	NATIONAL	CALIFORNIA	NATIONAL
Ozone	$\text{O}_3$	1 Hour	0.09	0.12	180	235	If exceeded	If exceeded on more than 3 days in 3 years
Carbon Monoxide	CO	8 Hours	9.0	9.0	10,000	10,000	If exceeded	If exceeded more than 1 day per year
		1 Hour	20	35	23,000	40,000	If exceeded	If exceeded more than 1 day per year
Inhalable Particulate Matter	$\text{PM}_{10}$	Annual Geometric Mean	—	—	30	—	If exceeded	—
		Annual Arithmetic Mean	—	—	—	50	—	If exceeded as a 3-year single station avg.
		24 Hours	—	—	50	150	If exceeded	If exceeded by the mean of annual 99 <sup>th</sup> percentile values over 3 years
Nitrogen Dioxide	$\text{NO}_2$	Annual Average	—	0.053	—	100	—	If exceeded
		1 Hour	0.25	—	470	—	If exceeded	—
Sulfur Dioxide	$\text{SO}_2$	Annual Average	—	0.03	—	80	—	If exceeded
		24 Hours	0.04	0.14	105	365	If exceeded	If exceeded more than 1 day per year
		3 Hours	—	0.5	—	1,300	—	If exceeded more than 1 day per year
		1 Hour	0.25	—	655	—	If exceeded	—
Lead Particles	Pb	Calendar Quarter	—	—	—	1.5	—	If exceeded more than 1 day per year
		30 Days	—	—	1.5	—	If equaled or exceeded	—
Sulfate Particles	$\text{SO}_4$	24 Hours	—	—	25	—	If equaled or exceeded	—
Hydrogen Sulfide	$\text{H}_2\text{S}$	1 Hour	0.03	—	42	—	If equaled or exceeded	—
Vinyl Chloride	$\text{C}_2\text{H}_3\text{Cl}$	24 Hours	0.010	—	26	—	If equaled or exceeded	—

Sources: California Air Resources Board 1991, BAAQMD 1998a, and 40 C.F.R. Parts 50, 53, and 58.

TABLE 3.10-1 (CONTINUED)  
AMBIENT AIR QUALITY STANDARDS APPLICABLE IN CALIFORNIA

**Notes:**

All standards except the national  $PM_{10}$  and  $PM_{2.5}$  standards are based on measurements corrected to 25 degrees Celsius and 1 atmosphere pressure.

The national  $PM_{10}$  and  $PM_{2.5}$  standards are based on direct flow volume data without correction to standard temperature and pressure.

Decimal places shown for standards reflect the rounding precision used for evaluating compliance.

Except for the 3-hour sulfur dioxide standard, the national standards shown are the primary (health effects) standards.

The national 3-hour sulfur dioxide standard is a secondary (welfare effects) standard.

U.S. EPA adopted new ozone and particulate matter standards on July 18, 1997; the new standards were struck down in Federal court; U.S. EPA is considering an appeal (U.S. EPA 1999).

The national 1-hour ozone standard is rescinded for an area when U.S. EPA determines that the standard has been achieved in that area.

Previous national  $PM_{10}$  standards (which had different violation criteria than the September 1997 standards) will remain in effect for existing  $PM_{10}$  nonattainment areas until U.S. EPA takes actions required by Section 172(e) of the Clean Air Act or approves emission control programs for the relevant  $PM_{10}$  state implementation plan.

Violation criteria for all standards except the national annual standard for  $PM_{2.5}$  are applied to data from individual monitoring sites.

Violation criteria for the national annual standard for  $PM_{2.5}$  are applied to a spatial average of data from one or more community-oriented monitoring sites representative of exposures at neighborhood or larger spatial scales (40 C.F.R. Part 58).

The "10" in  $PM_{10}$  and the "2.5" in  $PM_{2.5}$  are not particle size limits; these numbers identify the particle size class (aerodynamic equivalent diameters in microns) collected with 50 percent mass efficiency by certified sampling equipment. The maximum particle size collected by  $PM_{10}$  samplers is about 50 microns aerodynamic equivalent diameter; the maximum particle size collected by  $PM_{2.5}$  samplers is about 6 microns aerodynamic equivalent diameter (40 C.F.R. Part 53).

TABLE 3.10-2

## SAN FRANCISCO BAY AREA AIR QUALITY ATTAINMENT STATUS

POLLUTANT	AVERAGING TIME	CALIFORNIA STANDARDS	FEDERAL STANDARDS
Ozone	1 Hour	Nonattainment	Nonattainment
Carbon Monoxide	8 Hours	Attainment	Maintenance
	1 Hour	Attainment	Attainment
Nitrogen Dioxide	Annual	—	Attainment
	1 Hour	Attainment	—
Sulfur Dioxide	Annual Average	—	Attainment
	24 Hours	Attainment	Attainment
	1 Hour	Attainment	—
Inhalable Particulate Matter (PM <sub>10</sub> )	Annual Arithmetic Mean	—	Attainment
	Annual Geometric Mean	Nonattainment	—
	24 Hours	Nonattainment	Unclassified
Fine Particulate Matter (PM <sub>2.5</sub> )	Annual Average	—	Status coming 2002/3
	24 Hours	—	Status coming 2002/3

Source: California Air Resources Board 1991, BAAQMD, 1998a.

— = No standard for this averaging time.

In June 1995, the San Francisco Bay Area was reclassified from a moderate nonattainment area to an attainment/maintenance area for the Federal 1-hour ozone standard. There were several violations of the Federal ozone standard in 1995 and 1996 in Contra Costa, Alameda, and Santa Clara counties (California Air Resources Board [CARB] 1995-1996; BAAQMD 1997a). In June 1998, U.S. EPA redesignated the Bay Area as an "unclassified" nonattainment area for ozone (BAAQMD 1998a). The Bay Area had no exceedances of the ozone standard in 1997, but experienced eight exceedances in 1998. In July 1997, U.S. EPA adopted a new 8-hour ozone standard (an 8-hour average of 0.08 ppm). Attainment of the 8-hour standard for ozone would be judged on data collected during 1997, 1998, and 1999. This standard was struck down in Federal court; U.S. EPA is considering an appeal (U.S. EPA 1999).

In April 1998, the San Francisco Bay Area was reclassified from a moderate nonattainment area to an attainment/maintenance area for the Federal carbon monoxide standard. The Bay Area is currently designated as an attainment area for the Federal nitrogen dioxide and sulfur dioxide standards.

In July 1997, U.S. EPA revised the violation criteria for existing Federal PM<sub>10</sub> standards and adopted new Fine Inhalable Particulate Matter (PM<sub>2.5</sub>) standards (15 micrograms per cubic meter [ $\mu\text{g}/\text{m}^3$ ] as an annual average and 65  $\mu\text{g}/\text{m}^3$  as a 24-hour average). The Bay Area is currently designated as unclassified for the Federal Inhalable Particulate Matter (PM<sub>10</sub>) standard. The PM<sub>2.5</sub> standard was struck down in Federal court; U.S. EPA is considering an appeal (U.S. EPA 1999).

### 3.10.3 Existing Air Quality Conditions in the City of Richmond

Areas adjacent to the Bay, such as the NFD Point Molate property, have a low air pollution potential, due to frequent ventilation by winds and the low influx of pollutant concentrations from upwind sources. During calm periods, occasional elevated pollutant levels occur.

#### *Ambient Air Quality*

Ozone, carbon monoxide, PM<sub>10</sub>, nitrogen dioxide, and sulfur dioxide are monitored at a number of locations in the Bay Area by the BAAQMD. The monitoring station at the intersection of 13<sup>th</sup> Street and Costa Avenue is located about 3.4 miles (5.5 km) east of NFD Point Molate. Table 3.10-3 summarizes 1991 to 1997 monitoring data collected at this monitoring station for ozone, carbon monoxide, PM<sub>10</sub>, nitrogen dioxide, and sulfur dioxide. The Richmond 13<sup>th</sup> Street monitoring station ceased operation after 1997 and was replaced by the San Pablo–El Portal monitoring station, located near the intersection of Road 20 and San Pablo Avenue in San Pablo. This station is about 4.5 miles (7.2 km) east-northeast of NFD Point Molate. Table 3.10-4 summarizes 1997 to 1999 monitoring data collected at the San Pablo–El Portal monitoring station.

Federal standards for ozone were not violated in Richmond from 1991 to 1997, while state standards for ozone were violated at the 13<sup>th</sup> Street monitoring station on two days in 1993. Federal and state standards for carbon monoxide, nitrogen dioxide, and sulfur dioxide were not violated in the City from 1991 to 1999. The Federal PM<sub>10</sub> standard has not been exceeded since 1991; however, the more stringent state PM<sub>10</sub> standard was exceeded at the 13<sup>th</sup> Street station one to nine times per year between 1991 and 1997, with the exception of 1996, when the state PM<sub>10</sub> standard was not exceeded.

At the San Pablo–El Portal monitoring station, the state standard for ozone was exceeded once in 1997 and once in 1999. No other standards were violated at this station between 1997 and 1999.

**TABLE 3.10-3**  
**SUMMARY OF AIR QUALITY MONITORING DATA**  
**FOR THE RICHMOND 13TH STREET MONITORING STATION**

AIR QUALITY INDICATOR	1991	1992	1993	1994	1995	1996	1997
<b>Ozone</b>							
Peak 8-hour value (ppm)	0.05	0.07	0.08	0.07	0.07	0.06	0.05
Peak 1-hour value (ppm)	0.05	0.08	0.12	0.09	0.09	0.08	0.05
Days above Federal 1-hour standard	0	0	0	0	0	0	0
Days above state 1-hour standard	0	0	2	0	0	0	0
<b>Carbon Monoxide</b>							
Peak 8-hour value (ppm)	4.5	4.1	3.8	2.9	2.4	2.6	2.6
Days above Federal standard	0	0	0	0	0	0	0
Days above state standard	0	0	0	0	0	0	0
<b>Nitrogen Dioxide</b>							
Peak 1-hour value (ppm)	0.08	0.08	0.08	0.08	0.07	0.09	0.06
Days above state standard	0	0	0	0	0	0	0
<b>Sulfur Dioxide</b>							
Peak 24-hour value (ppb)	.033	.037	.034	.033	.034	.033	.037
Days above Federal standard	0	0	0	0	0	0	0
Days above state standard	0	0	0	0	0	0	0
<b>PM<sub>10</sub></b>							
Annual geometric mean ( $\mu\text{g}/\text{m}^3$ )	97	55	76	82	53	42	77
Days above Federal standard	0	0	0	0	0	0	0
Days above state standard	9	5	3	3	1	0	1

Source: CARB 1999.

**Notes:**

Federal PM<sub>10</sub> is based on arithmetic averages; state PM<sub>10</sub> is based on geometric mean.

ppm = parts per million.

ppb = parts per billion.

$\mu\text{g}/\text{m}^3$  = micrograms per cubic meter.

Federal 1-hour ozone standard is 0.12 ppm; state 1-hour ozone standard is 0.09 ppm.

Federal 1-hour carbon monoxide standard is 35 ppm; state 1-hour carbon monoxide standard is 20 ppm.

Federal 8-hour carbon monoxide standard is 9 ppm; state 8-hour carbon monoxide standard is 9 ppm.

Federal PM<sub>10</sub> standards: 50  $\mu\text{g}/\text{m}^3$ , annual arithmetic mean; 150  $\mu\text{g}/\text{m}^3$ , 24-hour average.

State PM<sub>10</sub> standards: 30  $\mu\text{g}/\text{m}^3$ , annual geometric mean; 50  $\mu\text{g}/\text{m}^3$ , 24-hour average.

PM<sub>10</sub> samples are collected approximately once every six days. Other pollutants are monitored continuously (except for instrument calibration and maintenance periods). Days reported above Federal and state PM<sub>10</sub> standards are days on which measurements were made.

**TABLE 3.10-4**  
**SUMMARY OF AIR QUALITY MONITORING DATA**  
**FOR THE RICHMOND SAN PABLO-EL PORTAL MONITORING STATION**

AIR QUALITY INDICATOR	1997	1998	1999
<b>Ozone</b>			
Peak 8-hour value (ppm)	0.079	0.063	0.071
Peak 1-hour value (ppm)	0.108	0.074	0.100
Days above Federal 1-hour standard	0	0	0
Days above state 1-hour standard	1	0	1
<b>Carbon Monoxide</b>			
Peak 8-hour value (ppm)	2.35	2.36	2.39
Days above Federal standard	0	0	0
Days above state standard	0	0	0
<b>Nitrogen Dioxide</b>			
Peak 1-hour value (ppm)	0.065	0.059	0.071
Days above state standard	0	0	0
<b>Sulfur Dioxide</b>			
Peak 24-hour value (ppb)	0.006	0.007	0.008
Days above Federal standard	0	0	0
Days above state standard	0	0	0
<b>PM<sub>10</sub></b>			
Annual geometric mean ( $\mu\text{g}/\text{m}^3$ )	16	16	77
Days above Federal standard	0	0	NM
Days above state standard	0	0	NM

Source: CARB 1999.

**Notes:**

Federal PM<sub>10</sub> is based on arithmetic averages; state PM<sub>10</sub> is based on geometric mean.

NM = No longer monitored at this station.

ppm = parts per million.

ppb = parts per billion.

$\mu\text{g}/\text{m}^3$  = micrograms per cubic meter.

Federal 1-hour ozone standard is 0.12 ppm; state 1-hour ozone standard is 0.09 ppm.

Federal 1-hour carbon monoxide standard is 35 ppm; state 1-hour carbon monoxide standard is 20 ppm.

Federal 8-hour carbon monoxide standard is 9 ppm; state 8-hour carbon monoxide standard is 9.0 ppm.

Federal PM<sub>10</sub> standards: 50  $\mu\text{g}/\text{m}^3$ , annual arithmetic mean; 150  $\mu\text{g}/\text{m}^3$ , 24-hour average.

State PM<sub>10</sub> standards: 30  $\mu\text{g}/\text{m}^3$ , annual geometric mean; 50  $\mu\text{g}/\text{m}^3$ , 24-hour average.

PM<sub>10</sub> samples are collected approximately once every six days. Other pollutants are

monitored continuously (except for instrument calibration and maintenance periods).

Days reported above Federal and state PM<sub>10</sub> standards are days on which measurements were made.

### **Industrial Emissions**

Industrial operations that affect local air quality are located near the NFD Point Molate property. These include the Chevron refinery immediately east of the property, on the opposite side of the ridge from the NFD Point Molate property, and General Chemical Corporation's Richmond Plant, which is less than 1.5 miles (2 km) east of the property. The predominant wind pattern results in these facilities being usually downwind of the NFD Point Molate property.



**Toxic Air Contaminants Associated with Industrial Activity**

Emissions of air contaminants related to the regular operation of industrial facilities in the San Francisco Bay Area Air Basin are regulated by the BAAQMD, through its air quality permitting authority (See Section 3.10.4).

Section 313 of the Emergency Planning and Community Right-to-Know Act (also known as Title III) of the Superfund Amendments and Reauthorization Act (SARA) (Pub. L. 99-499) requires certain industrial facilities to submit an annual inventory of toxic chemical releases; the Chevron Richmond Refinery (refinery) and General Chemical Corporation (chemical plant) are subject to these reporting requirements. U.S. EPA and the Department of Toxic Substances Control (DTSC) maintain Toxic Release Inventories of toxic chemical releases reported in California. For the 1998 reporting year, the refinery reported emissions of 35 of the toxic air contaminants that are subject to reporting requirements. The chemical plant reported emissions of one of the toxic air contaminants subject to reporting requirements (sulfuric acid).

The refinery had an average of 29 air quality permit violations per year between January 1994 and December 1998, including releases of excess sulfur dioxide, hydrogen sulfide, flammable hydrocarbons, and other pollutants. Most of these violations resulted in fines (BAAQMD 1998c and 1999a). In 1999, the refinery had 35 permit violations, and in the first four months of 2000, the refinery had 2 violations (BAAQMD 2000b). The chemical plant had six air quality permit violations between January 1994 and April 2000, including releases of excess nitrogen oxide, sulfur dioxide, and other pollutants. Some of these violations also resulted in fines (BAAQMD 1998c, 1999a, and 2000b).

**Objectionable Odors Associated with Industrial Activity**

Although objectionable odorous emissions generally do not pose a health risk, BAAQMD maintains records of odor complaints. Odor complaint histories are used to establish the potential significance of odor impacts associated with proposed development. BAAQMD records include citizen complaints associated with the refinery and chemical plant. There were 36 confirmed and 275 unconfirmed odor complaints associated with the refinery between January 1, 1993 and April 30, 2000 (BAAQMD 1998b, 1999a, and 2000b). Complaints are "confirmed" when BAAQMD can correlate it to an actual release from the facility. The NFD Point Molate property is within the 2-mile (3-km) screening distance recommended by BAAQMD for evaluating odor impacts from refineries.

NFD Point Molate is slightly beyond the 1-mile (1.6 km) odor screening distance recommended by BAAQMD for evaluating odor impacts from chemical manufacturing facilities. Six confirmed odor complaints were associated with the chemical plant in 1993; there were no confirmed odor complaints between December 1993 and July 1999.

Twenty-six unconfirmed odor complaints were associated with the chemical plant in 1993 and two in 1998. There were no unconfirmed odor complaints from 1994 through 1997, in 1999, or in the first four months of 2000 (BAAQMD 1998c, 1999a, and 2000b).

#### **Airborne Asbestos Fibers**

Some of the existing structures at the property have been constructed with asbestos-containing materials (ACM) (see Section 3.13). Renovation of or modifications to these structures could generate airborne asbestos fibers.

#### **3.10.4 Plans and Policies**

The plans and policies discussed below are relevant to the disposal and reuse of the NFD Point Molate property.

##### ***Federal***

##### **Clean Air Act**

The CAA, 42 U.S.C. §§ 7401-7671, requires states to develop, adopt, and implement a State Implementation Plan (SIP) to achieve, maintain, and enforce Federal air quality standards. These plans must be submitted to and approved by U.S. EPA. In California, the SIP consists of separate elements for different regions of the state. SIP elements generally are developed on a pollutant basis whenever one or more air quality standards are being violated.

In the Bay region, SIP document preparation has been a coordinated effort involving three regional agencies: BAAQMD, ABAG, and MTC. The regional component of the California SIP document for the Bay Area is known as the Bay Area Clean Air Plan (CAP). CAPs are to be revised every three years. The most recent CAP for the Bay Area was released in December 1997 (BAAQMD 1997b).

Section 112 of the CAA, 42 U.S.C. § 7412, establishes the National Emission Standards for Hazardous Air Pollutants (NESHAP). NESHAP includes regulations addressing the demolition or renovation of buildings with ACM (40 C.F.R. Part 61, Subpart M, 1998). In the Bay Area Air Basin, NESHAP regulations governing ACM releases associated with construction activities are implemented by BAAQMD District Regulation 11, Rule 2, Hazardous Materials: Asbestos Demolition, Renovation, and Manufacturing.

The CAA also requires Federal agencies to comply with the CAA and with Federally enforceable air quality management plans. U.S. EPA has enacted separate rules that establish conformity analysis procedures for highway and mass transit projects and for other (general) Federal agency actions.

A formal conformity determination is required for Federal actions in nonattainment or maintenance areas when the total direct and indirect emissions of nonattainment pollutants (or their precursors) exceed specified thresholds (42 U.S.C. § 7506(c), 40 C.F.R. Part 93). Federal actions, such as transfers of ownership, interests, and titles to real or personal property, are exempt from U.S. EPA's general conformity rule, because such actions are presumed to result in emissions below the threshold level. This is because the agency transferring the property will not retain responsibility or control over subsequent activities. The proposed Navy disposal of the NFD Point Molate property falls under this exemption. The Record of Non-Applicability is in Appendix E.

#### **Toxic Air Contaminants**

Under the CAA amendments, the number of regulated toxic substances from stationary sources was expanded to 189 compounds. U.S. EPA was directed to develop standards for toxic air pollutants, including consideration of economic issues in the control criteria, and to investigate the exposure risk from toxic air contaminants in urban areas.

There are no control requirements for toxic air contaminant emissions from mobile sources, except for lead. Lead was one of the first hazardous air pollutants to receive national attention in the 1970s. Since lead emissions can be toxic, National Ambient Air Quality Standards were developed under the CAA to reduce the public's exposure; therefore, lead has the dual distinction of being a criteria pollutant and a hazardous air pollutant/toxic air contaminant.

As new fuels are developed or other measures are implemented to reduce criteria pollutants, it is likely that toxic air contaminant emissions will decrease. Emission control measures for mobile sources typically have focused on vehicle emissions, fuel efficiency standards, and, more recently, on reformulation of fuels.

#### ***State***

##### **California Clean Air Act**

Responsibility for air quality management programs in California is divided between CARB, as the primary state air quality management agency, and air pollution control districts, as the primary local air quality management agencies. (BAAQMD is the local agency in the Bay Area.) The California Clean Air Act legislation in the 1970s resulted in a gradual merger of local and Federal air quality programs, particularly industrial source air quality permit programs.

The roles and responsibilities of both CARB and local air pollution control districts were expanded by the California Clean Air Act of 1988 (1988 California Statute 1568, California Health & Safety Code Part 3, Chapter 6, Sections 40700–40719). This act adopted transportation control measure programs and emission reduction programs for

indirect and area-wide emission sources. Local air pollution control districts also have been given added responsibility and authority to adopt transportation control measure programs and emission reduction programs for indirect and area-wide emission sources.

The California Clean Air Act requires air pollution control districts and air quality management districts to develop air quality management plans for meeting state ambient air quality standards for ozone, carbon monoxide, sulfur dioxide, and nitrogen dioxide. CARB is responsible for developing a plan for meeting state PM<sub>10</sub> standards.

Under the California Clean Air Act, attainment is required “as expeditiously as practicable,” with mandated emission control program requirements based on the nonattainment classification for ozone and carbon monoxide.

#### **Air Quality Permits**

Industrial and commercial facilities can be required to obtain air quality permits for equipment and operations. The BAAQMD has the primary air quality permitting authority throughout the Bay Area. CARB has oversight authority over the BAAQMD. In cases involving Federal actions, U.S. EPA has oversight authority over BAAQMD. Permits are categorized as construction or installation authorizations for individual pieces of equipment or as permits for continued operation of equipment and facilities.

Federally required air quality permit programs are integrated into the state and local permit program. This results in a two-step permit process: an initial authority to construct permit and a subsequent permit to operate.

#### **Toxic Air Contaminants**

CARB is responsible for identifying specific toxic air contaminants through research and evaluation. AB 2728 mandated state recognition of the 189 toxic air contaminants identified by the 1990 Federal CAA amendments. The Air Toxics “Hot Spots” Information and Assessment Act, California Health & Safety Code Sections 44300-44394, requires that toxic risk assessments include the toxic air contaminants specified in the Risk Assessment Guidelines of the California Air Pollution Control Officers Association (CAPCOA). CARB has identified over 729 toxic air contaminants (including the 189 Federal hazardous air pollutants) as part of the “Hot Spots” Act.

BAAQMD’s current risk management policy requires that any incremental increase in emissions of toxic air contaminants from new or modified stationary sources be evaluated for human health impacts, especially cancer risk, using the CAPCOA guidelines. Some sources may be exempt if emissions of toxic air contaminants are below certain annual emission levels set by the BAAQMD.

**BAAQMD CEQA Guidelines**

BAAQMD guidelines provide assistance for evaluating the potential air quality impacts of projects in the Bay Area. These guidelines explain the procedures that BAAQMD recommends for the environmental review process required by CEQA. The most recent BAAQMD guidance was issued in December 1999 (BAAQMD 1999b). The following air quality considerations are important during project planning:

- Land use and design measures to encourage alternatives to the automobile and to conserve energy.
- Land use conflicts and exposure of sensitive receptors to odors, toxics, and criteria pollutants.
- Applicable BAAQMD rules, regulations, and permit requirements.

**Local****City of Richmond General Plan**

The General Plan sets forth air quality goals and policies. The following goals and policies are applicable to the NFD Point Molate property:

- Preserve the air quality so that air pollution levels do not threaten public health and safety. This will apply not only to the local area, but to potential sources of pollution originating in, though not impacting the City of Richmond (Goal OSC-P).
- Only approve projects that will comply with applicable regulations and will not exceed air quality standards (Policy OSC-P.1).
- New developments should not subject residents to objectionable odors or other nuisances (e.g., dust) (Policy OSC-P.2).
- Ensure that developers and businesses work with regional, state and Federal agencies to meet air quality standards (Policy OSC-P.3).

**City of Richmond Hazardous Materials Ordinance**

Developments in the City are required to manage hazardous materials and waste in compliance with the City's Hazardous Materials Ordinance. (Hazardous materials and waste can produce emissions, including toxic air contaminants and objectionable odors.) The ordinance requires that activities:

- Not create an unreasonable risk to the public health and safety or to the surrounding properties and activities.
- Be consistent with the character and economic function of the surrounding area.
- Not result in a significant impact on environmentally sensitive areas.
- Be approved by the Fire Department.

### 3.11 NOISE

This section describes noise in the ROI of NFD Point Molate. The ROI for noise is the NFD Point Molate property and an area approximately 0.5 miles (0.8 km) from the site. The ROI extends westward past the Point Molate pier, southward to the I-580 toll plaza, eastward to Chevron's main refinery area, and northward to just past Point Orient. This distance demarcates where noise generated from new construction or future operations on the property would be attenuated to a less than noticeable level. Similarly, noise generated more than 0.5 miles (0.8 km) away from the property generally would not be noticeable on site.

#### 3.11.1 Noise Terminology

Noise is described in terms of decibels (dB). Because people perceive different sound frequencies at different volumes, environmental noise levels are measured using the A-weighted decibel (dBA) scale, which approximates noise as typically perceived by people.

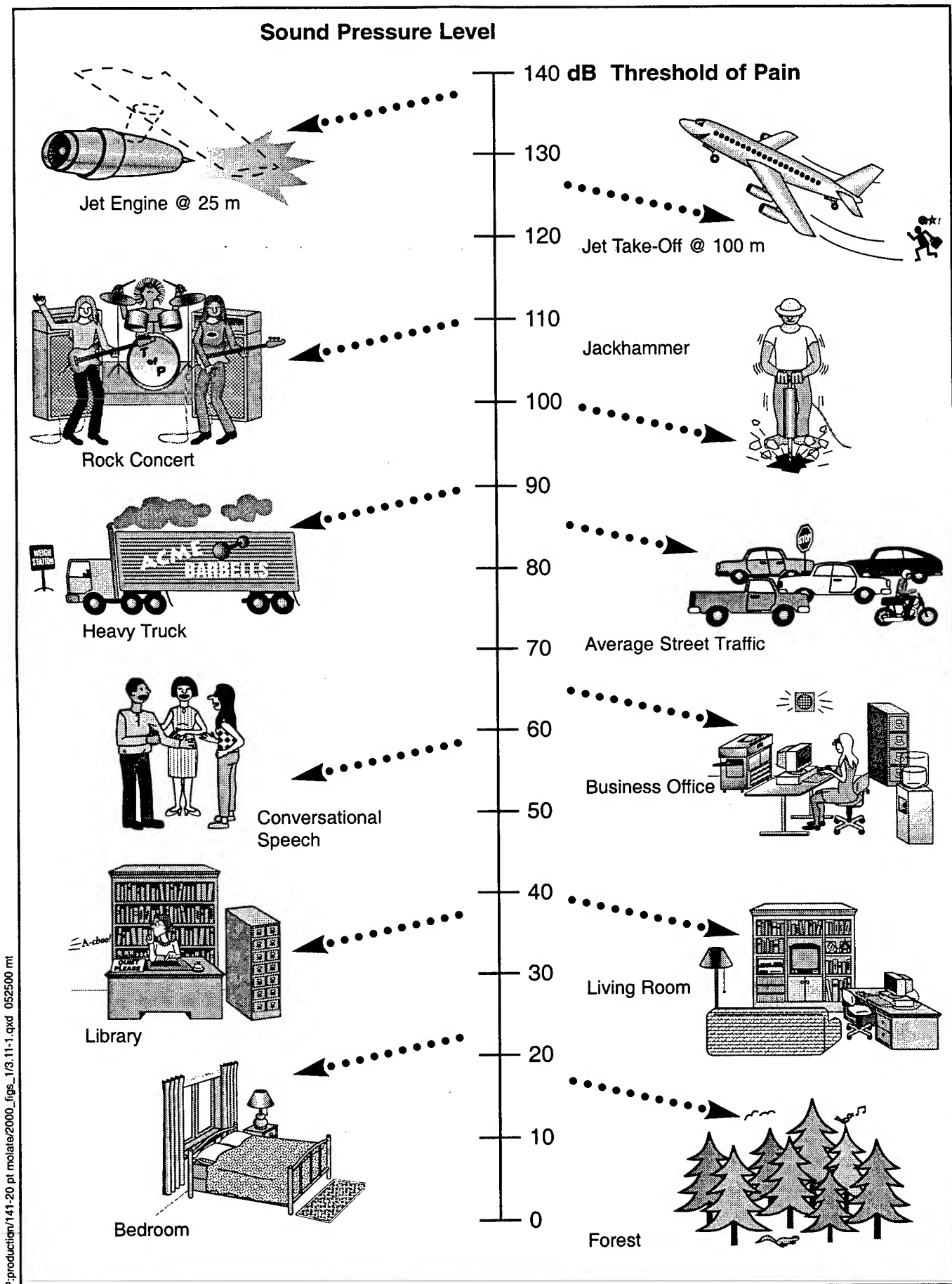
Average noise exposure over a 24-hour period is presented as a day-night average sound level (Ldn) or a Community Noise Equivalent Level (CNEL). Ldn values are calculated from hourly noise equivalent level (Leq) values, with the Leq values for the nighttime period (10:00 P.M. to 7:00 A.M.) increased by 10 dB to reflect the greater disturbance potential from nighttime noises. Leq values are used to develop single-value descriptions of average noise exposure over various periods. CNEL values are very similar to Ldn values but include a 5-dB annoyance adjustment for evening Leq values (7:00 P.M. to 10:00 P.M.) in addition to the 10-dB adjustment for nighttime Leq values.

A noise level increase of 3 dBA is generally assumed to be perceptible, and a 6 dBA increase typically is perceived as a doubling of noise levels. Noise levels below 50 dBA are generally perceived as quiet, and noise levels greater than 65 dBA are generally considered undesirable (yet noise levels of 65 to 75 dBA can be acceptable, depending on the land use). Typical noise levels from various activities are shown in Figure 3.11-1.

#### 3.11.2 Existing Noise Conditions

The NFD Point Molate property is isolated from existing noise sources by distance and topography, resulting in low background noise levels (below 65 dBA CNEL). The predominant noise source on the NFD Point Molate property is intermittent truck traffic passing through on Western Drive.

Noise from overflying aircraft is intermittently audible in the vicinity of the site, particularly in early morning (the site is beneath a nighttime/early morning flight path from the Oakland Airport).



P:\production\141-20 pt molate\2000\_figs\_1\3.11-1.qxd 052500 ml

Source: Harris 1979

Figure 3.11-1: Typical A-Weighted Sound Levels of Common Sounds

### 3.11.3 Plans and Policies

The plans and policies discussed below are relevant to the disposal and reuse of the NFD Point Molate property.

#### *Federal*

The Noise Control Act of 1972, 42 U.S.C. §§ 4901–4918, established a requirement that all Federal agencies comply with applicable Federal, state, and local noise control regulations. Federal agencies also were directed to administer their programs in a manner that promotes an environment free from noise that jeopardizes public health or welfare.

The DOD evaluates the acceptability of noise levels at military installations according to three noise level zones:

- CNEL levels below 65 dB (Zone 1)
- CNEL levels of 65 to 75 dB (Zone 2)
- CNEL levels above 75 dB (Zone 3)

All existing NFD Point Molate land uses are considered compatible with Zone 1 noise levels. Educational and residential land uses generally are not compatible with Zone 2 noise levels unless special acoustic treatments and designs are used to ensure acceptable interior noise levels. Residential and educational land uses are not compatible with Zone 3 noise levels. Industrial and manufacturing land uses may be acceptable in Zone 3 areas if special building designs and other measures are implemented. Existing noise levels at the NFD Point Molate property represent Zone 1 conditions.

#### *State*





The California Department of Health Services guidelines for the noise element of local general plans categorize various outdoor CNEL ranges into four compatibility categories, depending on land use: normally acceptable, acceptable and conditionally acceptable, normally unacceptable, and clearly unacceptable.

These guidelines identify normally acceptable noise levels for low-density residential uses as less than 60 dBA CNEL. For high-density residential uses, the normally acceptable range is below 65 dBA CNEL. For educational and medical facilities, CNELs of 60 to 70 dBA are conditionally acceptable. For office and commercial land uses, CNELs up to 67.5 and 77.5 dBA, respectively, are conditionally acceptable. These guidelines are shown in Figure 3.11-2.

The California Department of Housing and Community Development has adopted noise insulation performance standards for new hotels, motels, and dwellings other



Land Use Category	Community Noise Exposure Ldn or CNEL, dBA					
	55	60	65	70	75	80
Residential Low Density Single Family, Duplex Mobile Homes						
Residential—Multi-Family						
Transient Lodging: Motels, Hotels						
Schools, Libraries, Churches, Hospitals, Nursing Homes						
Auditoriums, Concert Halls, Amphitheaters						
Sports Arena, Outdoor Spectator Sports						
Playgrounds, Neighborhood Parks						
Golf Courses, Riding Stables, Water Recreation, Cemeteries						
Office Buildings, Business, Commercial, and Professional						
Industrial, Manufacturing, Utilities, Agriculture						

Interpretation	
 Normally Acceptable Specified land use is satisfactory, based upon the assumption that any buildings involved are of normal conventional construction, without any special noise insulation requirements.	 Normally Unacceptable New construction or development should generally be discouraged. If new construction or development does proceed, a detailed analysis of the noise reduction requirement must be made and needed noise insulation features included in the design.
 Conditionally Acceptable New construction or development should be undertaken only after a detailed analysis of the noise reduction requirement is made and needed noise insulation features are included in the design. Conventional construction, but with closed windows and fresh air supply systems or air conditioning, will normally suffice.	 Clearly Unacceptable New construction or development should generally not be undertaken.

Source: City of Richmond 1994a.

P:\141-20 pt molate\Aug Figures\Noise Land Use Table.xls 08/24/99 CLF

Figure 3.11-2: State of California Land Use Noise Compatibility Matrix

than detached single-family structures (24 C.C.R. Title 25, Section 4370 [1998]). The standards require that these buildings be constructed so that outdoor noise sources do not cause interior noise levels (with the windows closed) to exceed annual average values of 45 dB CNEL.

### **Local**

#### **City of Richmond General Plan**

The Noise Element of the General Plan includes goals and policies to control community noise levels and transportation-related noise. Applicable goals include controlling the level of noise pollution by preventing the development of incompatible land uses, rather than relying entirely on acoustical techniques after the fact; and minimizing noise impacts of transportation facilities. Noise Element policies relevant to reuse of the NFD Point Molate property are summarized below:

- Discourage development, where such development will significantly increase the existing noise levels, unless mitigation measures are designed as part of the project to limit noise emissions to an acceptable level (Policy NE-A.1).
- Develop criteria establishing proper site planning and building orientation that will lessen noise intrusion and minimize noise elements (Policy NE-A.2).
- Avoid land uses that place residential dwellings with "heavy" industrial and maritime uses (Policy NE-A.4).
- Require new commercial and industrial developments with potential noise and vibration-producing activities to provide noise study reports (Policy NE-A.6).
- Require new developments of proposed noise-sensitive uses locating in noise-impacted areas of Ldn 55 or greater to provide noise study reports (Policy NE-A.7).
- Work to mitigate transportation noise impacts through location and design of transportation facilities and location and design of noise-sensitive uses (Policy NE-B.1).
- Continue to support traffic and highway improvements that will lessen noise or alleviate the need for through traffic, especially truck traffic, passing through residential neighborhoods (Policy NE-B.2).
- Regulate truck routes to provide effective separation from residential or other noise-sensitive land uses (Policy NE-B.3).

#### **City of Richmond Noise Ordinance**

The City's Noise Ordinance (City of Richmond Municipal Code, Chapter 9.52) prohibits uses or activities that create levels that exceed exterior noise levels as shown in Table 3.11-1.

**TABLE 3.11-1**  
**EXTERIOR NOISE LIMITS, CITY OF RICHMOND**

ZONING DISTRICT	MAXIMUM NOISE LEVEL IN dBA (LEVEL NOT TO BE EXCEEDED MORE THAN 30 MINUTES IN ANY HOUR)		Maximum Noise Level in dBA (Level Not to Be Exceeded More Than 5 Minutes in Any Hour between 10 P.M. and 7 A.M.) Measured at Any Boundary of a Residential Zone
	Measured at Property Line or District Boundary	Measured at Any Boundary of a Residential Zone	
Single-Family Residential	60	NA	NA
Multifamily Residential	65	NA	NA
Commercial	70	60	50 or ambient noise level
Light Industrial and Office Flex	70	60	50 or ambient noise level
Heavy and Marine Industrial	75	65	50 or ambient noise level
Public Facilities and Community Use	65	60	50 or ambient noise level
Open Space and Recreational Districts	65	60	50 or ambient noise level

114 Source: City of Richmond Municipal Code, Chapter 9.52.090.

115 NA = not applicable.

116 The ordinance specifies measuring methods and establishes limitations on type and  
 117 duration of noise. The exterior noise limits for any source of noise within a residential  
 118 zone must be reduced by 10 dBA between 10 P.M. and 7 A.M. The exterior noise limits  
 119 for any source of noise in any zone other than a residential zone must be reduced between  
 120 10 P.M. and 7 A.M. so that the noise does not exceed 50 dBA when measured at the  
 121 property line of a "noise-sensitive use" such as residential, medical, or educational. The  
 122 ordinance specifies that, where technically and economically feasible, construction  
 123 activities be conducted in such a manner that the maximum noise at affected properties  
 124 will not exceed specified levels. The ordinance specifies maximum noise levels (ranging  
 125 from 55 to 85 dBA) dependent on time of day (daytime, nighttime, or weekend), type of  
 126 land use zoning (single-family residential, multi-family residential, or  
 127 commercial/industrial zones), and types and duration of equipment use (stationary for  
 128 over 15 days or mobile for less than 15 days).

129 The City's noise ordinance does not apply to NFD Point Molate while in Federal  
 130 ownership. Noise levels at the inactive base would not, however, exceed those specified  
 131 in the ordinance.

## 3.12 UTILITIES

This section describes water distribution, sanitary sewer, storm water, electrical, and telecommunications systems and solid waste management in the ROI. The ROI for utilities is the NFD Point Molate property and the service area of the service providers. Information on utilities at the NFD Point Molate property was obtained from background studies, site visits, and discussions with staff from service providers.

Provision of utilities at the NFD Point Molate property is Navy's responsibility. Through a cooperative agreement with Navy, the City maintains and operates the wastewater, sanitary sewer, and storm water systems.

### 3.12.1 Water Distribution System

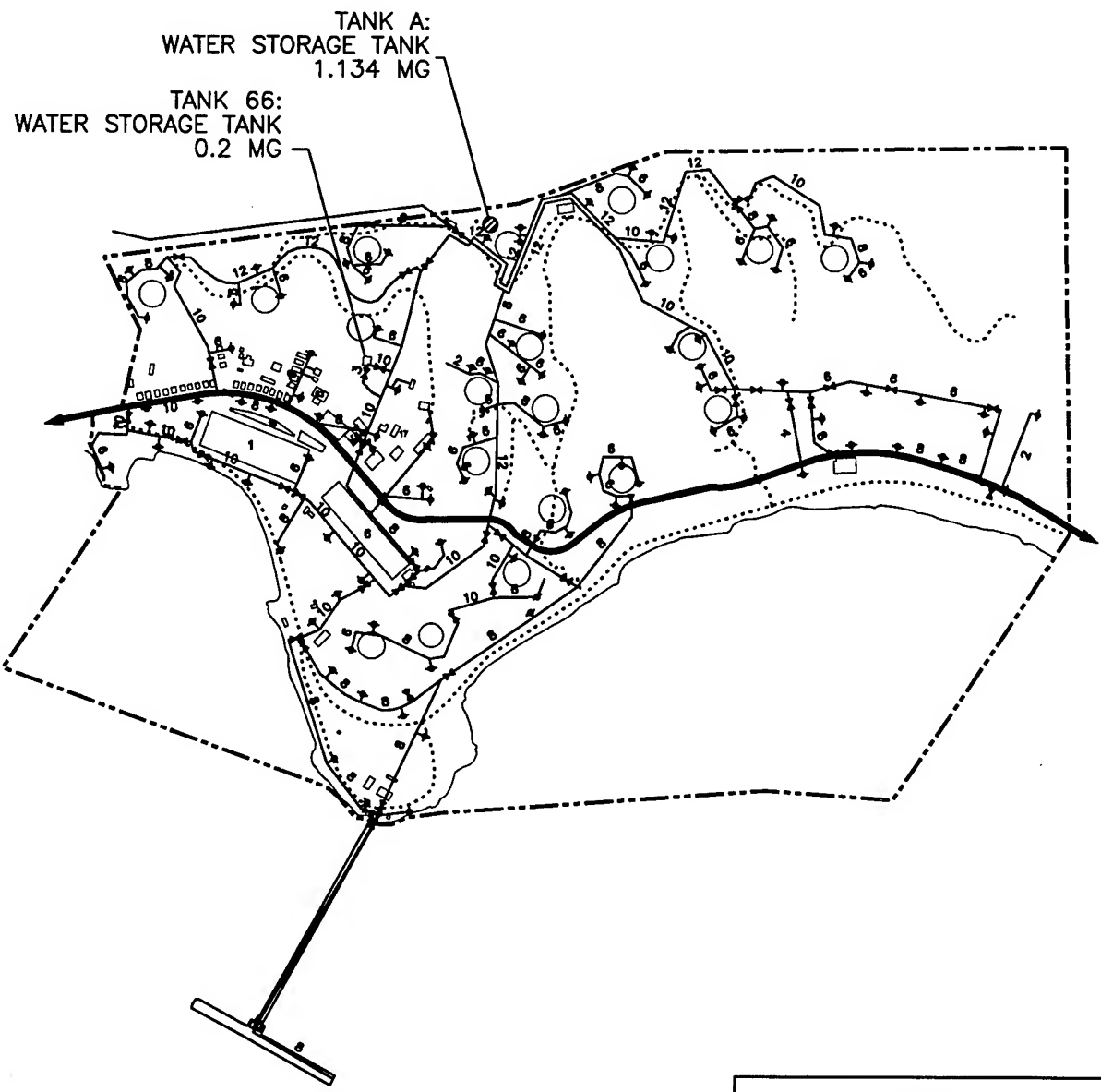
The water distribution system is shown in Figure 3.12-1. The system was installed in the early 1940s and has been periodically modified. The system is currently in caretaker status, which means it is not used but is maintained. Because the system is in an aged condition and there is insufficient demand for potable water, the system is normally off. It would be turned on for fire suppression if needed (U.S. Navy 1998c). The NFD Point Molate property is supplied with water from reservoirs in East Bay Municipal Utility District's (EBMUD's) Central Pressure Zone. Water enters NFD Point Molate through EBMUD's new 12-inch (30-cm) water main along Western Drive. Water is then pumped uphill to Tank A and distributed via the Navy's 14-inch (35-cm) primary and secondary lines. In addition, four small independent water distribution systems serve a few buildings.

Water for fire protection is stored in two tanks: Tank A, with a capacity of 1,134,000 gallons (4,292,640 liters) and Tank 66, with a capacity of 100,000 gallons (378,540 liters) (U.S. Navy 1998a). The tanks are located at elevations above 100 feet (30 m), and water is pumped up to them for storage. Water for fire protection is provided from the tanks by gravity flow of water through buried pipelines to lower elevations. There are 97 fire hydrants at the NFD Point Molate property. Twenty-four hydrants are near structures (U.S. Navy 1998h). The other hydrants are scattered throughout the site.

When NFD Point Molate was at full operation, water consumption was approximately 57,000 gallons per day (gpd) (215,770 liters per day [lpd]).

Navy replaced water heaters in 1989 because high levels of lead were found in the water. Water was tested for lead and copper in 1994 and 1995; neither constituent was detected above the Federal Action Levels for drinking water (U.S. Navy 1998c). However, a 1998 sampling of tap water (City of Richmond and Bay Area Defense Conversion Action Team 1999) found lead concentrations in water samples from Buildings 1 and 132 above the Action Level for lead (0.015 mg/l).

G:\141-20\dwg\14120\_21.DWG 082490 jrm



**LEGEND**

- 8 — Pipeline and Diameter (Inches)
- + — Fire Hydrant
- x — Valve
- ↔ Western Drive
- ..... Proposed Trail
- - - - - NFD Point Molate Boundary
- Existing Underground Fuel Tank
- MG = Million Gallons

Source: U.S. Navy 1988

Figure 3.12-1: Water Distribution System at NFD Point Molate

### 3.12.2 Sanitary Sewer and Industrial Wastewater System

#### *Sanitary Sewer System*

The NFD Point Molate sanitary sewer system is shown in Figure 3.12-2. The sanitary sewer system consists of a collection system, sanitary sewage treatment plant, and effluent pump station. When the plant was active, discharge was pumped into treatment ponds at the wastewater treatment plant. From the ponds, the effluent was piped to the disinfection system and then into the Bay. The treatment ponds, part of IRP Site 3 (described in Section 3.13), also handled industrial wastewater (discussed below).

Sewage lines were installed in 1952, and the sewage treatment plant was installed in 1973 in Building 125. The sanitary sewer system was closed in 1996 and is in caretaker status. It could be functional if the demand and water flow are established to justify its operation (U.S. Navy 1998c).

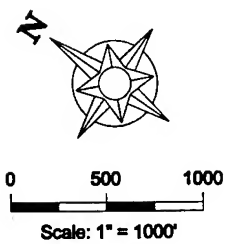
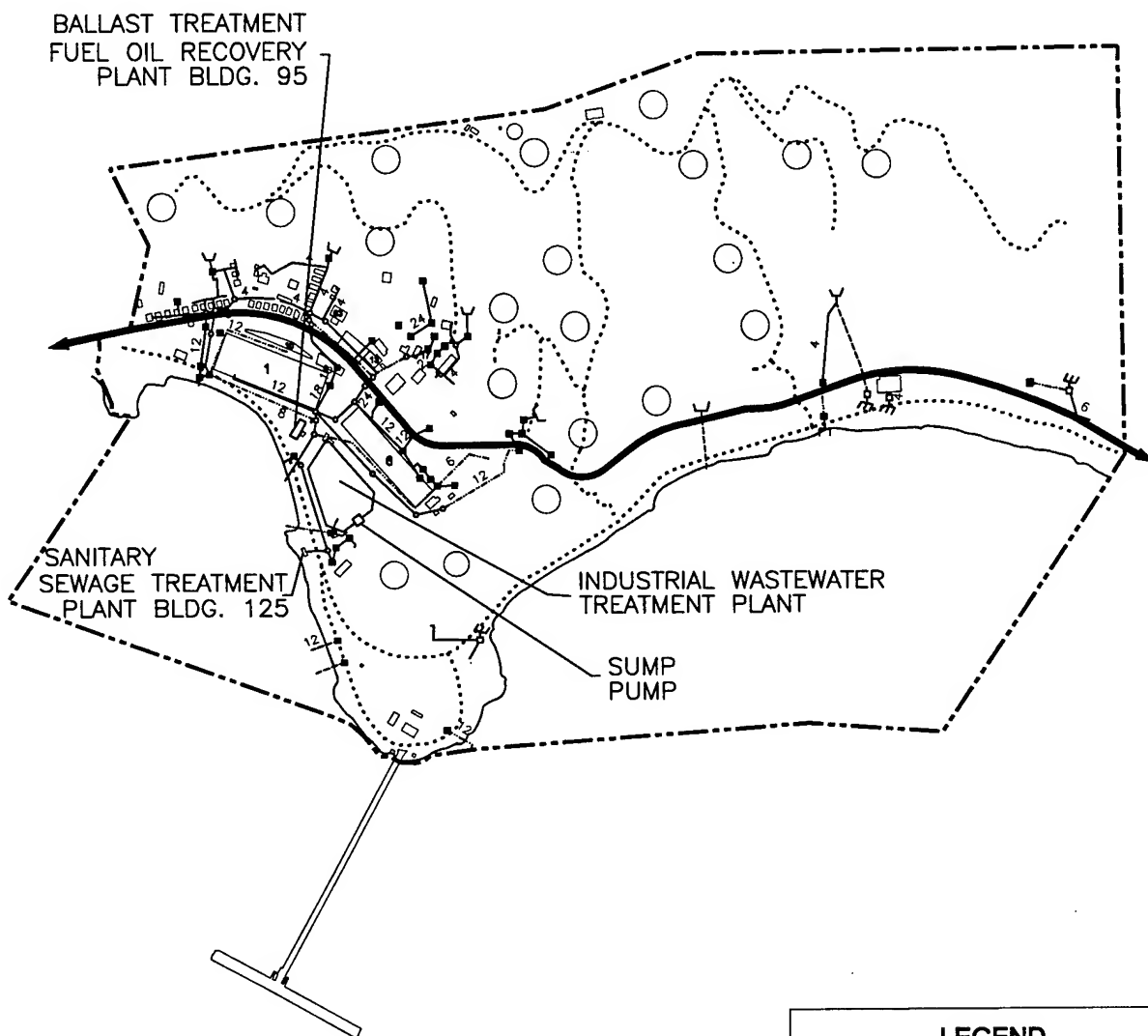
The design capacity of the sewage treatment plant is 24,000 gpd (90,800 lpd). However, its maximum loading is limited by a filter capacity of 20,000 gpd (75,700 lpd) (U.S. Navy 1998a). When NFD Point Molate was in full operation, the active load was approximately 9,000 gpd (34,100 lpd). The sewage treatment plant and the treatment ponds provided secondary treatment for domestic sewage and discharged the treated effluent approximately 400 feet (120 m) offshore into the Bay.

#### *Industrial Wastewater System*

An industrial wastewater treatment plant handled oily wastewater, ballast water, wastewater, and fuel. The plant includes three settling and aeration basins (ponds), chlorination/dechlorination system, coagulation unit, and filters. The three ponds provided about 30 hours detention time based on 500 gallons per minute (1,900 liters per minute) continuous flow. Actual detention time was typically considerably longer (U.S. Navy 1988). The oil reclamation system (ORS) reclaimed oily wastewater from USTs. Although the USTs are inactive, the ORS still handles oily water from the storm drain system, french drains, valve boxes, sumps, and skim pits at the UST areas. The water collected in the ORS is piped to the treatment ponds for some volatile organic compound (VOC) removal prior to discharge. The system was installed in 1942 and reconditioned in 1996; it is scheduled for closure (U.S. Navy 1998c).

The ballast, sediment, and wastewater system was used to transfer ballast, wastewater, and oily water to three tanks (Tanks 20, B, and C) for temporary storage, where settling allowed the separation of fuel and wastewater. The fuel was recycled and the wastewater transferred to the industrial wastewater treatment plant.

G:\141-20\dwg\14120\_22.DWG 07/06/00 ml



LEGEND	
	Future Sewer Line
	Storm Sewer and Area Drain
	Pipeline and Diameter (Inches)
	Catch Basin
	Manhole
	Septic Tank
	Oil Containment
	Western Drive
	Proposed Trail
	NFD Point Molate Boundary
	Existing Underground Fuel Tank

Source: U.S. Navy 1988

Figure 3.12-2: Sanitary, Industrial Wastewater and Storm Water Sewer Systems at NFD Point Molate

### *City of Richmond Sewage Treatment*

The west side of San Pablo Peninsula is not connected to the Richmond Municipal Sewer District's system. Sewage generated by users on the west side of San Pablo Peninsula is trucked to the District's treatment plant at 601 Canal Boulevard in Point Richmond (Figure 3.12-3). The treatment plant's capacity for average dry-weather flow is 6.5 million gallons per day (mgd) (25 million liters per day [mld]) and 20 mgd (76 mld) for average wet-weather flow. The plant's capacity is 25 mgd (95 mld) for secondary treatment (Richmond Municipal Service District 1998a).

#### **3.12.3 Storm Water System**

The storm water system at the NFD Point Molate property is shown in Figure 3.12-2. The storm water collection system handles the french drains around the USTs and discharge from streets and landscaped areas. The system was installed in the 1940s and upgraded in 1983. The system consists of concrete catch basins and underground concrete conduits that transport storm water from 6 catch basins to 11 outfalls discharging to the Bay (U.S. Navy 1998c).

#### **3.12.4 Electrical System**

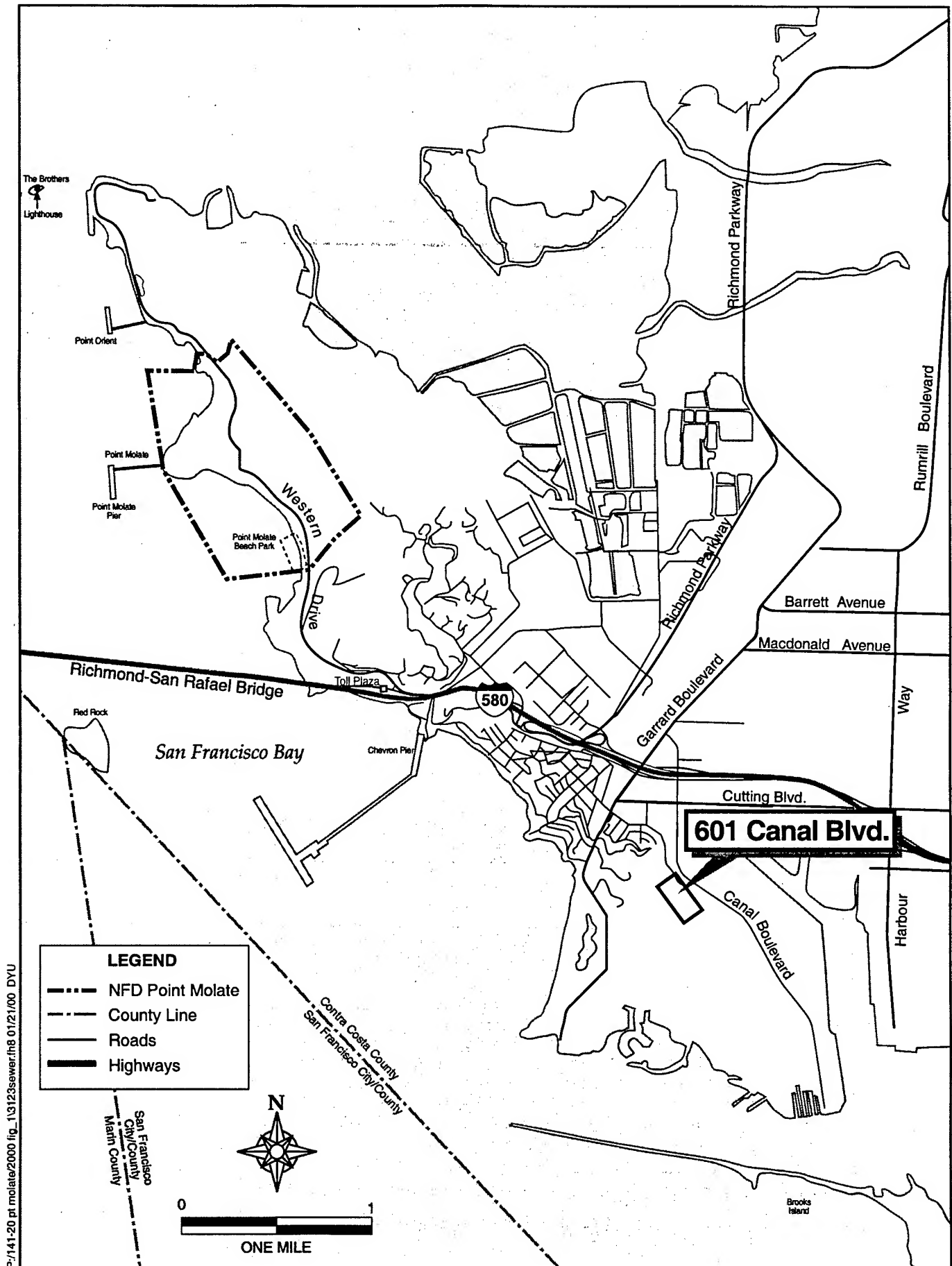
Electricity service is available from Pacific Gas and Electric Company (PG&E). PG&E furnishes power at 12.47 kilovolts. The PG&E lines enter the NFD Point Molate property from the south and follow Western Drive to a service connection located at Building 13. From Building 13, electricity is distributed via overhead lines to the NFD Point Molate property and northwest to other PG&E customers along Western Drive. The electrical system is shown in Figure 3.12-4. Upgrades and extensions to the system were completed between 1973 and 1990. During full operation, the average demand for electricity was approximately 120,000 kilowatts per month. Electricity is currently used for street lighting, in the wastewater treatment plant, and in Buildings 6 and 123.

A heating oil system served 26 houses; the other 3 houses were connected to the electrical system. Oil heating use was discontinued in 1995 when the last residents left. Buildings at the NFD Point Molate property were heated by boilers, except for Building 123, which is heated by electricity.

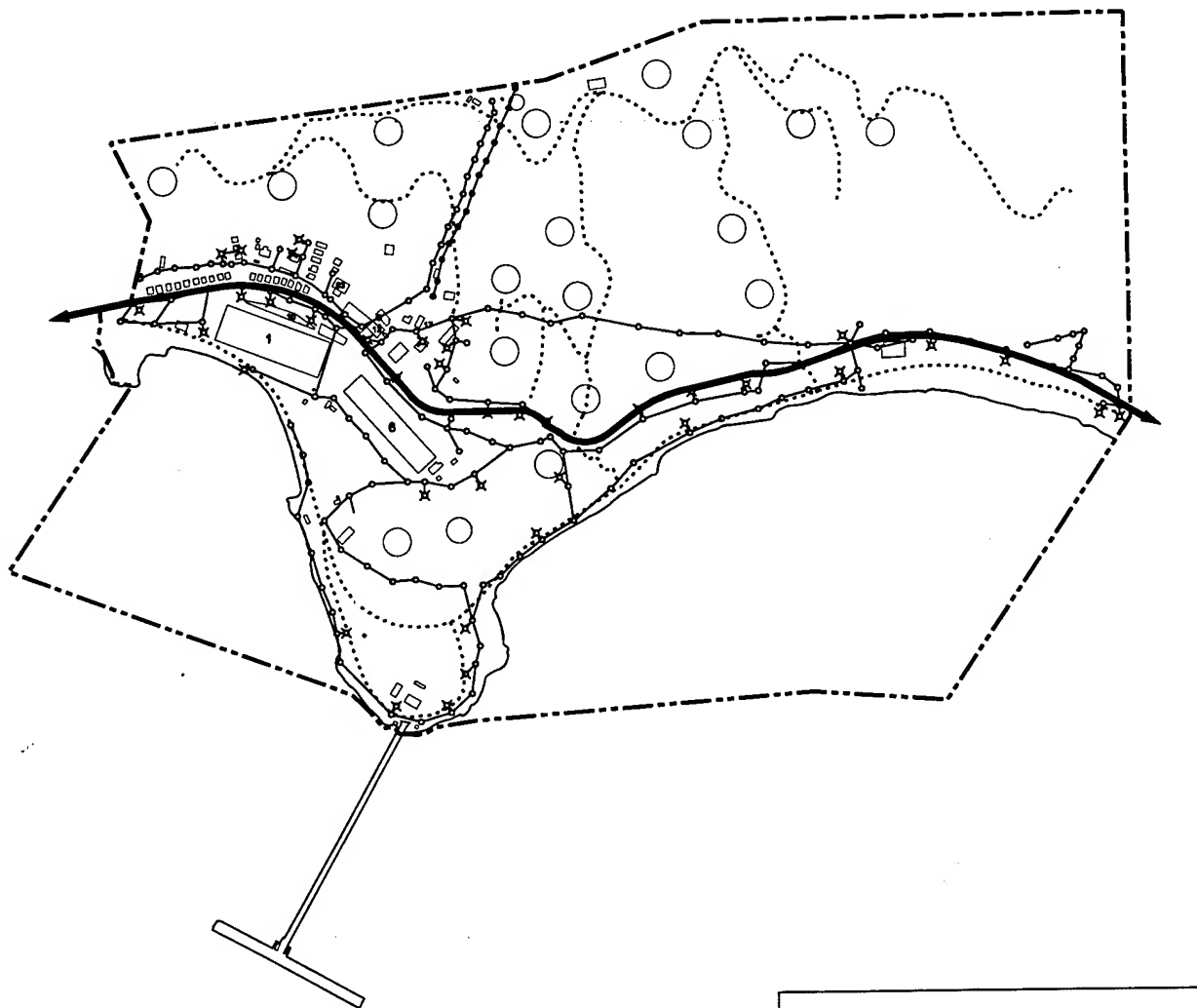
#### **3.12.5 Telecommunication System**

Pacific Bell provides telecommunication service to the NFD Point Molate property. Telephone service is provided to Buildings 6 and 123. There is a pay phone near the Fire House. The telephone equipment on the property is owned by Navy.





G:\141-20\dwg\14120\_23.DWG 07/09/00 mt



#### LEGEND

- Aerial Cable
- Wood Pole
- x Street Light
- Public Utility
- ↔ Western Drive
- ..... Proposed Trail
- - - - NFD Point Molate Boundary
- Existing Underground Fuel Tank

Source: U.S. Navy 1988

**3.12.6 Solid Waste Management**

A private company, Richmond Sanitation Service, collects non-hazardous solid waste from the NFD Point Molate property and disposes of it at the West Contra Costa Sanitary Landfill, located at Parr Boulevard and Garden Tract Road in the City. The landfill is estimated to have adequate capacity until 2002. After the West Contra Costa Sanitary Landfill closes, solid waste will be trucked to the Integrated Resource Recovery Facility at 101 Pittsburg Avenue in North Richmond and then hauled to the Potrero Hills Landfill near Fairfield (Richmond Sanitary Service 2000). When NFD Point Molate was in operation, approximately 30 tons per year (27 metric tons per year) of solid waste was generated.

**3.12.7 Plans and Policies**

The plans and policies discussed below are relevant to the disposal and reuse of the NFD Point Molate property.

***Federal***

The CWA, 33 U.S.C. § 1251, regulates wastewater discharges.

The Safe Drinking Water Act of 1974, 42 U.S.C. §§ 300f-300j-26, sets forth lead and copper standards for drinking water. U.S. EPA has regulatory authority over public drinking water systems.

The storm water system operates under an NPDES Industrial Activities Storm Water General Permit administered by the RWQCB.

The Solid Waste Disposal Act of 1965 (SWDA), 42 U.S.C. §§ 6901k-6992k, as amended by the Resource Conservation and Recovery Act (RCRA), 42 U.S.C. §§ 6901-6992k, requires that Federal facilities comply with all Federal, state, interstate, and local requirements regarding the disposal and management of solid waste.

***State***

The Porter-Cologne Water Quality Control Act, California Water Code Sections 13000-13953.4, regulates wastewater discharges. The RWQCB has permitting authority.

The California Integrated Waste Management Act, Cal. Pub. Res. Code Section 41780, requires California counties to divert 25 percent of their solid waste from landfills by 1995 and 50 percent by 2000. Cal. Pub. Res. Code Sections 42000-42023 established state programs designed to increase recycling and to encourage development of commercial markets for recyclable materials. In general, the state places the burden of action and responsibility for meeting the state requirements on each county.

*Local*

The General Plan sets forth goals and policies for utilities. The following are applicable to the reuse of the property:

- Coordinate with EBMUD to ensure an adequate water system for existing and future residents and to maintain adequate water reserves (Policy CF-H.1).
- Work cooperatively with Contra Costa County to identify storm water pollution control needs and modify the City's separate storm water control system, as necessary and practical, to control the quality of discharge to creeks, streams, and other waterways within Richmond and into San Francisco Bay; and ensure that all new developments address non-point source pollution in the design of their projects (Policy CF-H.6).
- Work actively to (a) reduce the amount of solid waste generated; (b) promote reuse of materials; (c) recycle as much of the solid waste as possible; (d) make use of the energy and nutrient value of the solid waste; and (e) properly dispose of the remaining solid waste (Policy CF-H.8).
- Coordinate and work with the County, through the West Contra Costa Integrated Waste Management Authority, on the development of source reduction, reuse, recycling, education and composting programs and the development of waste transfer, processing, and disposal facilities meeting the highest established environmental standards and regulations (Policy CF-H.10).
- Cooperate with and assist PG&E and telephone service providers to provide needed gas, electric, and telephone services and capacity to meet present and future projected needs (Policy CF-H.12).
- Encourage new utility mains and extensions in proposed new and improved street networks (Policy CF-H.15).
- Achieve efficient public service delivery by coordinating with affected jurisdictions and agencies concerning public and private developments (Goal GM-A).
- Achieve and maintain a level of service that meets or exceeds the City's adopted performance standards for parks, fire and police facilities, sanitary facilities, water services and flood control (Goal GM-B).
- Provide and maintain a level of public infrastructure facilities that adequately serves the present and future needs of the community (Goal GM-C).
- Comply with and maintain compliance with performance standards for fire, police, parks, sanitary facilities, water, and flood control established in Richmond's Growth Management Element, and apply the standards to Richmond's development review process (Policy GM-B.1). These services standards are as follows:

**Sanitary Facilities**

Verification by Richmond Municipal Sewer District, or other Sanitary District if applicable, that adequate collection and treatment to RWQCB standards can be provided.

**Water**

Verification by EBMUD that adequate water quantity and quality can be provided shall be required for approval of new development.

**Flood Control**

Capacity: Containment by an approved flood control and drainage system of a 100-year flood event, as determined by the Federal Emergency Management Agency.

**Other Facilities**

The General Plan Community Facilities Element contains specific policies, as opposed to performance standards, which address the following additional facilities and services:

(2) Solid Waste

(3) Utilities (Gas, Electricity, Telecommunications)

- Ensure that the new development pays its share of the costs associated with the provision of facilities for fire, police, parks, sanitary facilities, water, and flood control, by attaching project specific mitigation requirements as conditions of approval (Policy GM-B.2).

### 3.13 HAZARDOUS MATERIALS AND WASTE

This section describes Navy's past and present use of hazardous materials at NFD Point Molate; the IRP; and the Environmental Compliance Program at NFD Point Molate. The ROI for hazardous materials and waste is the NFD Point Molate property.

#### 3.13.1 Navy Operations

Hazardous materials storage at NFD Point Molate began in 1941 with bulk fuel (diesel, gasoline, jet fuel), lubrication oils and greases, solvents, corrosives, paints, mercury, chlorine, sulfur dioxide, and routine use of pesticides. During operation as a fuel depot, 24 large USTs stored fuel products and oily waste. Buildings 1, 10, 87, 85, 127, and 123 stored flammable and toxic materials.

Hazardous waste generated during operations as a fuel depot included waste oil, volatile organic compounds, tank ballast, ship bilge, spent solvents, expired paints, mercury waste, and sandblast grit.

After NFD Point Molate ceased fuel operations in 1995, all hazardous materials were removed from the facility in preparation for closure, except for a small quantity of materials required for caretaker maintenance. These hazardous materials include cleaning solvents, acetone, petroleum products, and painting supplies.

#### 3.13.2 Summary of Contamination and the IRP Process

##### *Introduction*

Remediation under the IRP addresses substances regulated under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) of 1980, 42 U.S.C. §§ 9601-9675. The IRP for the NFD Point Molate property was developed to establish a comprehensive environmental remediation program, ensure that remediation occurs in a timely manner, and ensure that regulatory and Navy requirements are met. The remediation levels will be protective of human health and the environment and will be consistent with land reuse. An information repository for the NFD Point Molate IRP is located at the Richmond Public Library, 325 Civic Center Plaza, Richmond.

A Community Relations Plan (CRP) was prepared for NFD Point Molate in January 1996. A public Restoration Advisory Board (RAB) and an agency review board was established to provide public and agency input to, and oversight of, the remediation process. The RAB membership list and a summary of the CRP are provided in Appendix F.

Navy performed a Preliminary Assessment (PA) for NFD Point Molate in 1987 (Naval Energy and Environmental Support Activity [NEESA] 1988). The PA process includes interviews with site personnel, review of documentation, and site visits. The PA report

recommended a Site Inspection (SI) for Site Installation Restoration (IR)-01 (Waste Disposal Area) and Site IR-02 (Sandblast Grit Disposal Areas). An SI involves limited collection of samples from a site. Site IR-03 (Treatment Ponds Area) was identified and recommended for inclusion in the SI after the PA was completed. Site IR-04 (Shoreline Areas) was later added because of concerns over past fuel spills and leaks. IR sites are described below. Their locations are shown on Figure 3.13-1.

#### ***IR-01: Waste Disposal Area***

IR-01 consists of a waste disposal unit in a steep-sided ravine near the center of the facility (Figure 3.13-1). The site is approximately 400 feet (120 m) long, 50 to 200 feet (15 to 61 m) wide, and up to 50 feet (15 m) deep. Wastes consist primarily of construction debris and brush. Drums containing residual fuel and tank bottom sludge also were disposed of in this area.

Five fuel distribution tanks and associated valve boxes and pipelines are located adjacent to the waste disposal area. Accidental leaks and spills have resulted in soil and groundwater contamination at IR-01.

A preliminary shallow soil investigation was performed in 1990 (U.S. Navy 1990), and the final SI was completed in 1992 (U.S. Navy 1992b). Sampling indicated that very low levels of total petroleum hydrocarbons (TPH) and polynuclear aromatic hydrocarbons (PAHs) were present in the subsurface soil and groundwater. IR-01 was further investigated under a Phase II Remedial Investigation (RI) (U.S. Navy 2000). A removal action under an Engineering Evaluation/Cost Analysis (EE/CA) is currently being conducted at IR-01.

#### ***IR-02: Sandblast Grit Disposal Areas***

Four localized areas of past sandblasting or sandblast grit disposal were identified and combined into IR-02, Sandblast Grit Disposal Areas (Figure 3.13-1). Samples of sandblast grit were found with concentrations up to 1,190 milligrams per kilogram (mg/kg) of chromium, 172 mg/kg of lead, and 1,750 mg/kg of nickel (U.S. Navy 1996h).

In June 1997, Navy conducted a Removal Action at IR-02. This Removal Action consisted of a survey of removal areas, removal and off-site disposal of sandblast grit, and the collection of confirmation soil samples. Based on this Removal Action, Navy prepared a CERCLA Record of Decision requiring no further action for IR-02.

#### ***IR-03: Treatment Ponds Area***

IR-03, the Treatment Ponds Area (Figure 3.13-1), is composed of three aeration basins built over a former sump pond. The sump pond, built in the 1940s, was used for the

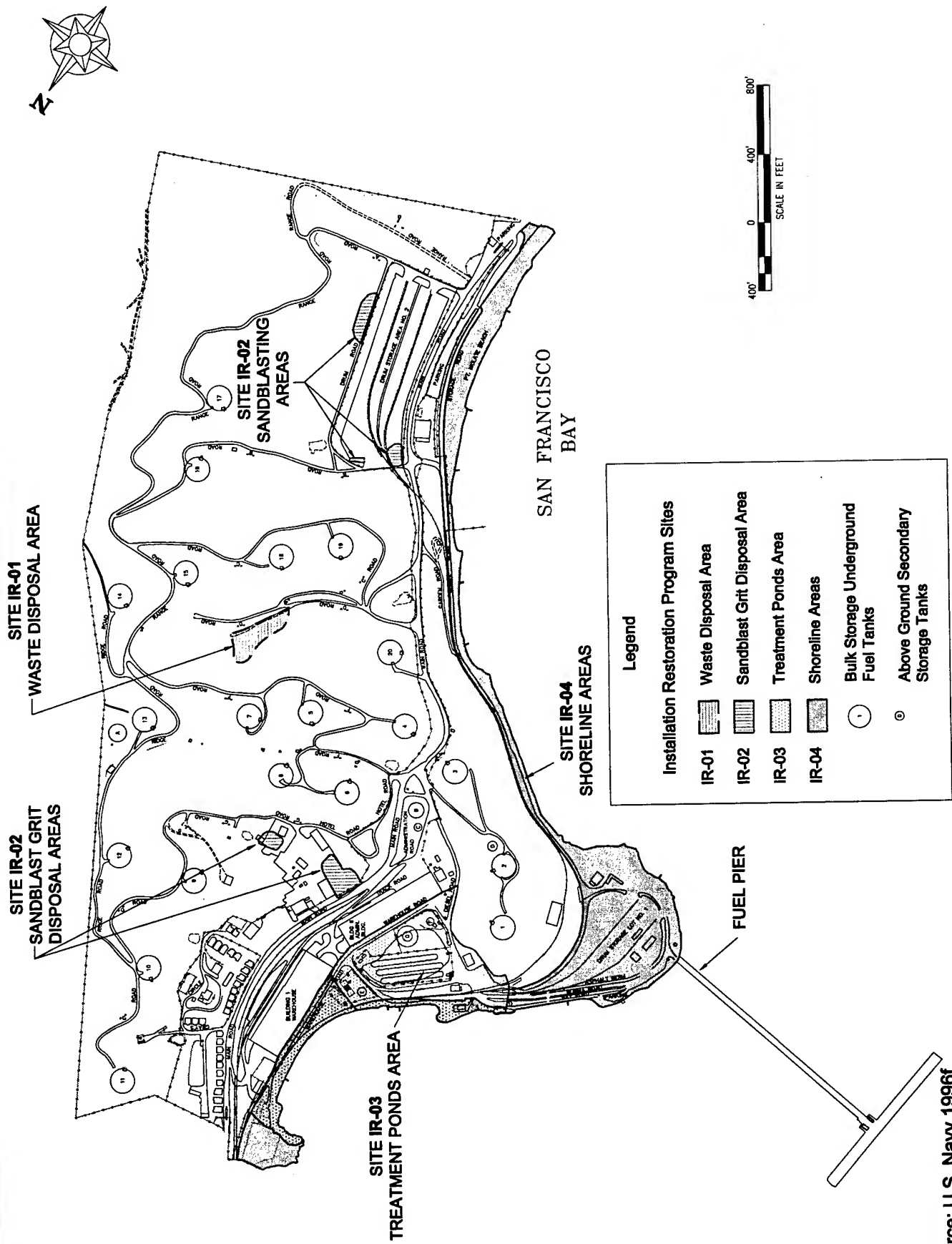


Figure 3.13-1: IR Site Locations at NFD Point Molate

Source: U.S. Navy 1996f



containment of contaminated fuels, tank bottom sludge, bunker fuel, leaking drums, and possibly other liquid wastes. Upon closure in 1975, liquids, sludge, and wastes in the sump pond were removed and disposed of off site at a permitted landfill. The pond was then filled with soil and rock derived from a local borrow pit.

Residual fuel, fuel constituents, and sludge remain in the soil, groundwater, and as floating fuel product (diesel and bunker fuel) on the groundwater surface. VOCs, semi-volatile organic compounds (SVOCs), TPH, benzene, toluene, ethylbenzene, and xylenes (BTEX), and sporadic low-level chlorinated VOCs have been detected in soil and groundwater.

An extraction trench was installed to intercept and remove floating fuel and contaminated groundwater for treatment (U.S. Navy 1996a). A 140-foot (43-m) extension, 80-foot (24-m) wing wall, and two product recovery systems were added to the trench system in 1998 (U.S. Navy 1998i). A groundwater treatment plant designed to treat extracted groundwater at the facility was installed as part of the removal and remedial actions. Recovered floating product is transported off site for recycling.

Treated water from the treatment ponds and the groundwater treatment plant is discharged to the Bay under Final Waste Discharge Requirements No. 97-045, NPDES Permit No. 0030074. IR-03 was further evaluated for soil and groundwater contamination during the Phase II RI (U.S. Navy 2000). An EE/CA is currently being conducted at IR-03. The EE/CA will include removal option screening and a screening level risk assessment.

#### ***IR-04: Shoreline Areas***

IR-04 comprises the entire length of the NFD Point Molate property shoreline. This area was included as an IR site because of past fuel spills and leaks that may have entered Bay waters and sediments. Investigations at IR 04 include soil and groundwater sampling along the shoreline (U.S. Navy 1992b, 1994b, 1994c, 1994d, 1994e, 1995).

Sediment testing and analysis detected TPH, BTEX, SVOCs, and PAHs in soils. TPH, BTEX, SVOCs, and chlorinated VOCs were the most commonly detected contaminants in shoreline wells. Free product also has been identified in some wells. IR-04 was further evaluated for soil and groundwater contamination during the Phase II RI (U.S. Navy 2000). A risk assessment found no risk to recreational users of the Point Molate Public Beach Area and no negative impacts on offshore biological receptors. A human health risk assessment and an ecological risk assessment are being scoped for the North Shoreline Area, with field work scheduled for the second quarter of 2001.

### 3.13.3 Environmental Compliance Program

Navy's Environmental Compliance Program addresses non-CERCLA regulated substances, including leaking USTs and releases of petroleum hydrocarbons, ACM, lead-based paint (LBP), and polychlorinated biphenyls (PCBs).

#### *Underground Storage Tanks*

Bulk fuel was stored in twenty 50,000-barrel (bbl) (8-million-liter) USTs that are connected through a series of underground pipelines. Fuel was transferred through a series of valve boxes, pipelines, and eight high-capacity pump stations. Sixteen of the tanks have been cleaned, and three are scheduled for cleaning this summer. One of the USTs is currently being used to store wastewater.

Three smaller capacity USTs (2,400 to 13,000 bbl [0.38 to 2.1 million liters]) stored water, sludge, and ballast water. These tanks are inactive and have been cleaned. One 8,000-gallon (30,000-liter) diesel fuel tank and one 1,000-gallon (3,800-liter) pesticide and wastewater tank were removed in 1990.

One 8,000-gallon (30,000-liter) gasoline tank for caretaker use was removed in 1999. Sixteen smaller tanks on site comprise one 1,000-gallon (3,800-liter) heating oil tank for Building 6 and fifteen 550-gallon (2,100-liter) heating oil tanks associated with the residential units. The heating oil tanks were emptied and cleaned in 1999.

A closure plan for the twenty 50,000-bbl (8-million-liter) USTs is under preparation. In addition, Navy intends to close, in place, all other USTs that are regulated under 23 C.C.R. Division 3, Chapter 16.

#### *Oil/Water Separators*

When the bulk storage tank system was active, an oil recovery system was installed to reclaim fuel from storm water contaminated by leaks and spills (U.S. Navy 1996h). Oil/water separators removed floating hydrocarbons from the water before it reached the NFD Point Molate wastewater treatment plant. Although NFD Point Molate has ceased fuel operations, the oil/water separators continue to process storm water runoff from some of the tank areas before discharging it to the treatment ponds. The oil/water separators are managed following BMPs in accordance with Navy's NPDES permit as part of meeting discharge requirements set by the RWQCB.

#### *Aboveground Storage Tanks*

Twenty-one aboveground storage tanks (ASTs) are located at NFD Point Molate (U.S. Navy 1996h). All ASTs are inactive and most have been cleaned.

### *Petroleum Hydrocarbons*

To maintain compliance with the CWA, a Spill Prevention, Control, and Countermeasure (SPCC) plan was prepared for the NFD Point Molate property in 1983. This plan has since been updated; the latest version was prepared in 1992 (NEESA 1992). As part of the SPCC plan, large concrete-lined catch basins were installed in topographic depressions at the base of the hills to prevent catastrophic spills from entering the Bay. In addition, oily storm water is controlled by a collection and oil/water separation system, described above.

Navy is investigating past spills (Figure 3.13-2) from the fuel distribution system (fuel pumps, valves, and pipelines) as a state requirement for UST closure. Soil and groundwater samples have been collected, tested, and evaluated. Navy is currently reviewing an internal draft *Characterization of USTs and Fuel Pipelines Report*. The characterization report is expected to be released in final form in May 2001. Screening levels are being developed separately under a fuel product action level development report (FPALDR) (U.S. Navy 1998g). The purpose of the FPALDR is to provide a standardized, risk-based, approach that is protective of human health and the environment, while supporting regulatory closure of the USTs and pipelines.

### *Asbestos-Containing Materials*

ACM is defined by U.S. EPA as a material containing greater than one percent asbestos. DOD policy states that all property containing ACM will be conveyed, leased, or otherwise disposed of as-is through the Base Realignment and Closure process unless ACM is determined to pose a threat to human health at the time of transfer. ACM is generally considered to be potentially hazardous when it is damaged or friable (a state in which the material can be crushed, pulverized, or crumbled by hand pressure when dry) and accessible.

Navy conducted asbestos surveys of all structures at NFD Point Molate in 1993, 1995, and 1997 (U.S. Navy 1998b). Damaged friable ACM that was considered to pose a potential hazard was found in 13 of the former housing units and 6 other structures. The damaged material generally consisted of torn or weathered parts of thermal system insulation around hot water pipes. In accordance with U.S. EPA guidelines, the damaged material was either spot-removed or repaired (U.S. Navy 1998b). The repair action, completed in September 1998, abated the potential ACM hazard. Remaining ACM is managed in place as part of Navy's compliance program.

### *Lead-Based Paint*

DOD policy regarding LBP in residential areas is to manage it in a manner protective of human health and the environment and to comply with all applicable laws and regulations.

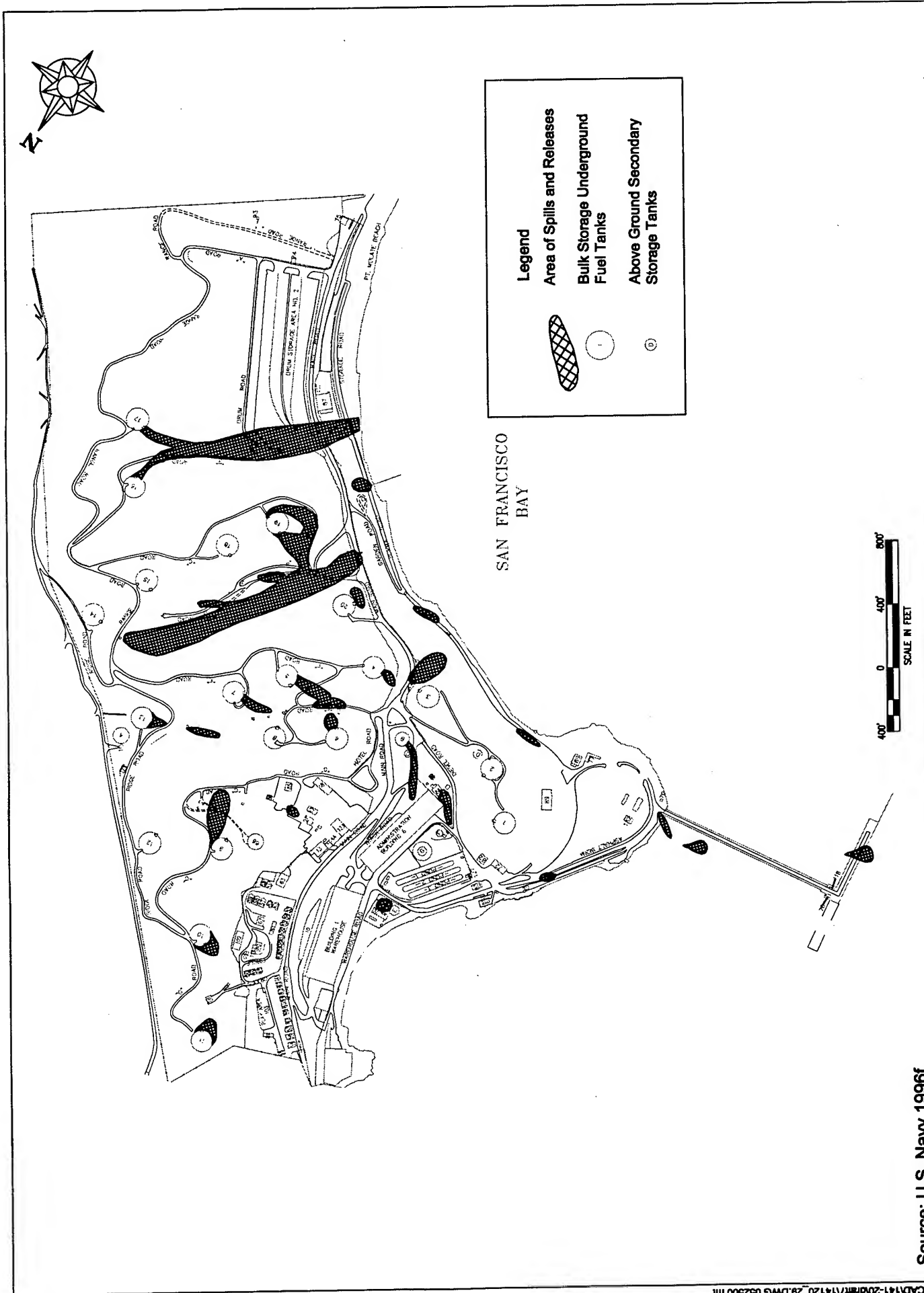


Figure 3.13-2: Known Hydrocarbon Spills and Releases at NPD Point Molate

Source: U.S. Navy 1996f

An LBP survey was conducted in the 29 former residential units by the Navy Public Works Center (PWC) in September 1994 (U.S. Navy 1996i). LBP was found inside the 29 units surveyed, and elevated levels of lead (maximum concentration of 1,748 mg/kg) were detected in soil outside the units. The residential units are not currently being used as residences, and residential use of these buildings is not a component of the Draft Reuse Plan. Consequently, Navy will not abate the LBP and associated lead-contaminated soils, although notifications will be provided.

#### *Polychlorinated Biphenyls*

Navy conducted a survey to identify possible PCB-containing equipment in 1993 (PWC, San Francisco 1995). Transformer oil with PCB concentrations above 50 ppm becomes hazardous when the oil is no longer in use. However, oil with PCBs can still be used. Seven transformers were found to contain PCBs at concentrations of 50 ppm or more and were subsequently removed (Allied Technology Group 1999). Another seven transformers and two electrical devices were found to contain PCBs at concentrations less than 50 ppm. These transformers and electrical devices will remain in place.

#### *Environmental Baseline Survey*

Under the Environmental Baseline Survey (EBS) program, Navy reviews information on a site-specific basis and determines whether additional assessment is required to evaluate potential risks to the environment from hazardous substances or petroleum products. The basewide EBS (U.S. Navy 1996h) and the BRAC cleanup team identified several areas at NFD Point Molate as requiring evaluation:

- Parcel 14: former small firing range.
- Parcel 16: former roundhouse and joiner shop.
- Parcel 21: fuel laboratory building (Building 21); paint shop (Building 88); storage building (Building 18); wash rack (Building 85); diesel fuel drums at the steam plant (Building 13); and the maintenance shop (Building 123).
- Parcel 30: locomotive maintenance and pesticide storage.
- Parcels 29, 30, and 31: groundwater down-gradient of Drum Storage Area No. 2.

Sampling results from the Phase I EBS (U.S. Navy 1999) indicated that the following areas require further evaluation, which is being conducted under the Phase II EBS sampling investigation:

- Parcel 21: Building 18 for trichloroethylene (TCE) in soil.
- Parcel 14: firing range for lead in soil.

- Parcel 30: Disease Vector and Ecological Control Center (Building 87) for PAHs in subsurface soil, pesticides in surface soil, and TCE in groundwater (Parcel 29 is included in the investigation as a potential source of TCE in groundwater).

These areas are shown on Figure 3.13-3. Field work is underway and is expected to be completed by fall 2000.

### 3.13.4 Plans and Policies

The plans and policies discussed below are relevant to the disposal and reuse of the NFD Point Molate property.

#### *Federal*

#### **Comprehensive Environmental Response, Compensation, and Liability Act**

Originally passed in 1980, CERCLA, 42 U.S.C. §§ 9601-9675, created national policies and procedures to identify and remediate sites contaminated by the release of hazardous substances. Under CERCLA, the process for identifying sites and prioritizing remediation was formalized through the National Contingency Plan (NCP). The NCP contains criteria for evaluating sites that provide the basis for the PA/SI. Sites given a priority ranking based on U.S. EPA's hazard ranking system are placed on the National Priorities List (NPL). Facilities placed on the NPL are commonly referred to as "Superfund" sites.

#### **Superfund Amendments and Reauthorization Act (SARA)**

In 1986, the U.S. Congress amended CERCLA to increase the funding for Superfund, modify contaminated site cleanup criteria, revise settlement procedures, provide a regulatory program for leaking UST cleanups, and provide an emergency planning and community right-to-know program, implemented through the Emergency Planning and Community Right-to-Know Act (EPCRA) (Pub. L. 99-499, Title III). EPCRA, which is codified at 42 U.S.C. § 11001, established the mandatory Federal standards for state community right-to-know programs and toxic chemical release reporting by manufacturers.

#### **Resource Conservation and Recovery Act**

In response to the need to more closely regulate the ongoing handling, storage, transportation, and disposal of hazardous wastes, the U.S. Congress passed RCRA, 42 U.S.C. §§ 6901-6992k, in 1976. RCRA sets forth the Federal regulations for operating hazardous waste storage, treatment, and disposal facilities. In California, the responsible agency for enforcing RCRA is the DTSC.

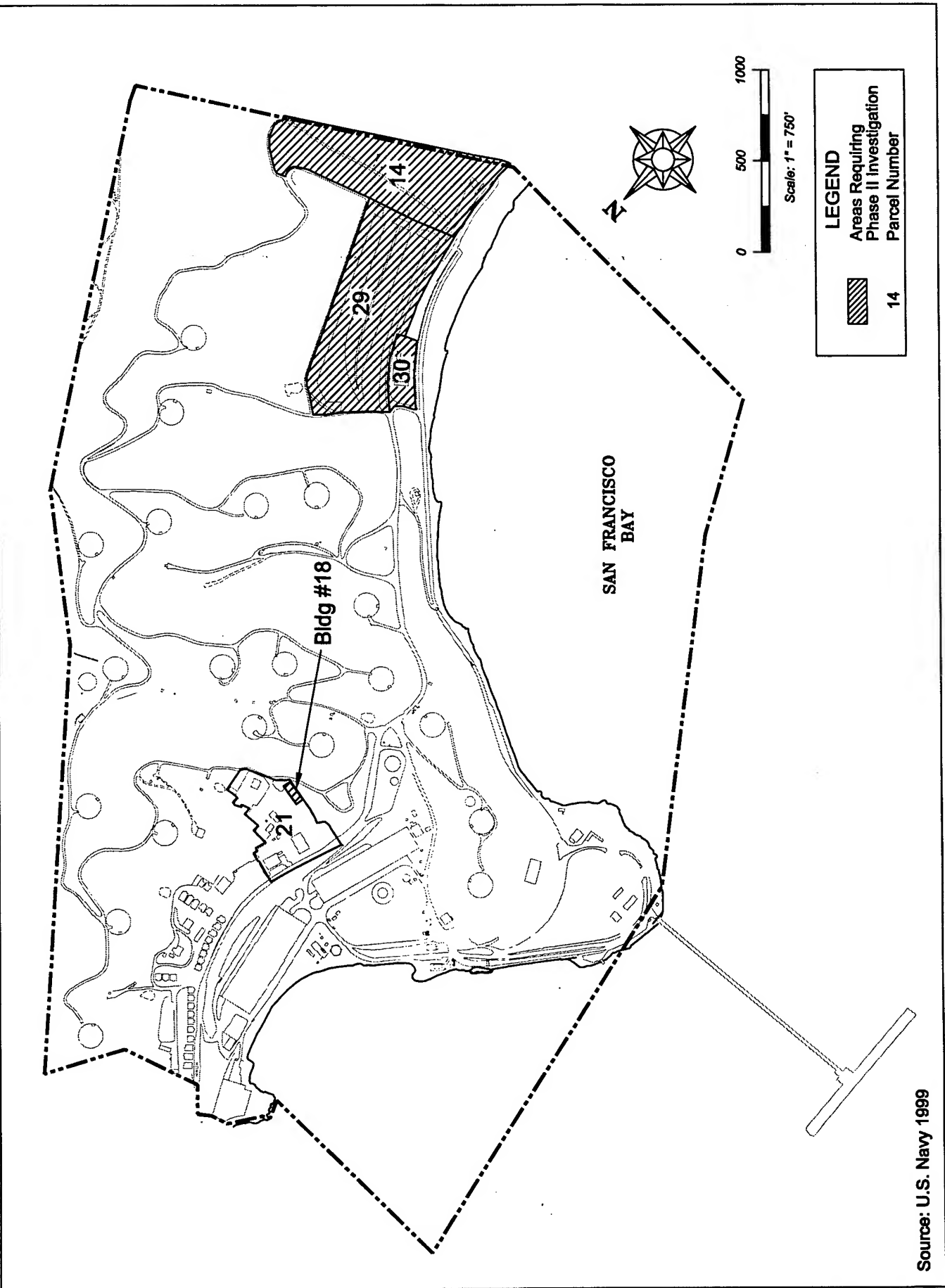


Figure 3.13-3: Areas Investigated in the Phase II EBS Investigation

03/14/2004 07:07:00 AM

**State****Hazardous Waste Control Law**

In 1972, before RCRA was enacted, California passed the Hazardous Waste Control Law (HWCL), 22 C.C.R. Chapter 6.5. This law provides regulations that equal or exceed the Federal standards set by RCRA for hazardous waste management. The responsible agency for enforcing the HWCL is DTSC.

**Hazardous Materials Transportation**

The U.S. Department of Transportation regulates the transportation of hazardous materials, including contaminated soil, between states. They also respond to hazardous materials transportation emergencies, determine container types to be used, and license hazardous waste haulers for hazardous waste transportation on public roads. The California Highway Patrol and Caltrans are the state agencies with primary responsibility for enforcing Federal and state regulations related to the transportation of hazardous material within California. The California Highway Patrol responds to spills and emergencies related to hazardous materials and waste on state highways.

**Contaminated Groundwater**

Groundwater discharged into the Bay must meet strict water quality standards. In conformance with the CWA, 33 U.S.C. §§ 1251-1387, groundwater discharged directly to the Bay requires an NPDES permit from the RWQCB. If necessary, groundwater is treated before discharge into the Bay to avoid degrading the Bay's water quality. Dischargers into the Bay are also required to meet stringent monitoring standards established by NPDES permits to ensure compliance under this permitting system.

**Corrective Action Plan for Petroleum-Related Contamination**

The San Francisco Bay RWQCB is the lead regulatory agency for petroleum-contaminated sites. (Petroleum compounds are specifically excluded from the CERCLA regulatory process, Title 1 § 100, Paragraph 14(f) [42 U.S.C. § 9601]). The RWQCB requires the development and implementation of a Corrective Action Plan (CAP) where groundwater has been contaminated or where petroleum contamination in soils has the potential to impact groundwater at levels above regulatory thresholds.

**Underground Storage Tanks**

USTs are regulated under RCRA, as mandated by the Hazardous and Solid Waste Amendments of 1984, Pub. L. 98-616, 98 Stat. 3221 (1984), 42 U.S.C. § 6901 note. The implementing regulations are found at 40 C.F.R. Part 280. The State of California has adopted regulations under C.C.R. tit. 23, Div. 3, Chapter 16. California regulations are more stringent than the Federal regulations and require secondary containment on both tank and piping systems installed after January 1, 1984. While state-wide oversight of



the UST program is assigned to the various RWQCBs, in Richmond, the County of Contra Costa is the local agency responsible for enforcing the UST program.

#### **Aboveground Storage Tanks**

ASTs are regulated by the U.S. EPA under the Oil Pollution Prevention Regulation of 1973, 40 C.F.R. Part 112, which requires the preparation of an SPCC Plan. In California, ASTs are regulated under California Health and Safety Code, Division 20, Chapter 6.67, the Uniform Fire Code, and the National Fire Protection Association regulations. The mechanism used for cleanup and prevention of spills is Senate Bill 1050 of January 1990.

#### **Local**

##### **Contra Costa County**

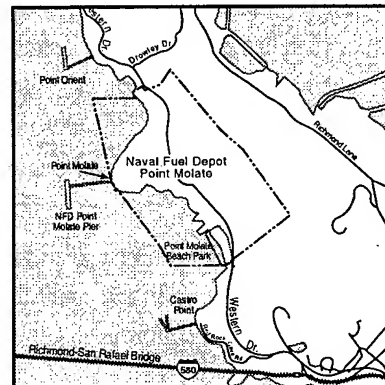
AB 2948 requires cities to develop a Hazardous Waste Management Plan. In conformance with the law, the City adopted the Contra Costa County Hazardous Waste Management Plan, as referenced in an addendum to the Safety Element of the City's General Plan. The addendum includes hazardous waste management policies and implementation programs to minimize the potential for adverse effects on human health and the environment.

##### **City of Richmond**

Section 15.04.820.020 of the City Zoning Ordinance, Hazardous Materials (City of Richmond 1997b), regulates all projects and activities that involve hazardous waste and materials. It establishes the basis for issuing conditional use permits for projects that could significantly and/or adversely affect public health or the environment, or that result in the generation, storage, treatment, or disposal of significant amounts of hazardous materials. The ordinance is also intended to encourage reduction of hazardous materials and waste. Where a conditional use permit is required, the applicant must provide information on the amount of hazardous materials used and level of hazard presented by the materials, safety measures, and location. Before granting a permit, the Planning Commission must make a finding that the activity will not create an unreasonable risk, will not result in an environmental impact, and has been approved by the Fire Department.

---

## 4 Environmental Consequences



## CHAPTER 4: ENVIRONMENTAL CONSEQUENCES

### CONTENTS

Page

4.1	Land Use .....	4-3
4.2	Visual Resources.....	4-18
4.3	Socioeconomics .....	4-22
4.4	Public Services.....	4-26
4.5	Cultural Resources.....	4-29
4.6	Biological Resources.....	4-34
4.7	Water Resources.....	4-40
4.8	Geology and Soils .....	4-44
4.9	Transportation, Traffic, and Circulation.....	4-48
4.10	Air Quality .....	4-64
4.11	Noise .....	4-73
4.12	Utilities .....	4-78
4.13	Hazardous Materials and Waste.....	4-86

#### 4. ENVIRONMENTAL CONSEQUENCES

This chapter describes the potential environmental consequences associated with the Department of the Navy (Navy) disposal and community reuse of the Fleet Industrial and Supply Center, Naval Fuel Depot Point Molate (NFD Point Molate). The Navy disposal action would convey the facility out of Federal ownership. This chapter is arranged by resource area, in parallel structure with Chapter 3, Affected Environment.

The City of Richmond's Draft *Point Molate Reuse Plan* (Draft Reuse Plan) (City of Richmond 1997a) identifies general categories and densities of land uses that could be allowed at the NFD Point Molate property. The Draft Reuse Plan would result in adaptive reuse of existing structures and facilities and the potential for new construction. The three community reuse alternatives assessed in this chapter are based on the Draft Reuse Plan. This chapter also describes the potential impacts of the No Action Alternative, under which NFD Point Molate would remain a closed Federal property and would not be reused or redeveloped.

Reasonably foreseeable impacts are evaluated for each alternative based upon full implementation of the alternative. The Draft Reuse Plan projected that the property would be built out over 20 years. For the purposes of the analysis in this document, full build-out is assumed to occur in 2020.

Impacts are described at a general level of detail, consistent with the level of detail in the Draft Reuse Plan. Future site-specific infrastructure and development proposals for the property could require additional environmental analysis under the California Environmental Quality Act (CEQA), if the nature and magnitude of effects differ substantially from those discussed in this document.

In the identification of direct impacts and reasonably foreseeable indirect impacts, all applicable measures and restrictions protective of human health and the environment required by existing laws and regulations have been taken into account. In many instances, the existence of such laws and regulations renders impacts that might have occurred in the absence of such laws highly unlikely and not reasonably foreseeable. In other instances, such laws and regulations work to lessen potential impacts to less than significant levels. Because compliance with applicable laws is mandatory upon the proponent of the action, compliance with the requirements of such laws and regulations is not separately identified as mitigation. Mitigation, as the term is used for purposes of the National Environmental Policy Act (NEPA) analysis, means only those discretionary measures (i.e., measures not required by operation of law) the proponent of the action can take to eliminate or lessen the impacts of the action. For example, where, as here, an acquiring entity or entities will be required to obtain and comply with environmental

permits, Navy does not consider the obtaining of permits or compliance with the terms of such permits to be mitigation.

Each identified impact is characterized as to its significance. Impacts are identified as either significant or less than significant. The text identifies significant impacts and, if feasible, corresponding mitigation. Less than significant impacts are also noted in the text, as are any unavoidable significant impacts, for which mitigation is either not feasible or would not eliminate or reduce the impact to a less than significant level. Although the focus of this analysis is on identifying adverse impacts, some beneficial effects also are identified.

#### Determining Significance

"Significantly" as used in NEPA requires consideration of both context and intensity. An action must be analyzed in several contexts, such as society as a whole (human, national), the affected region, the affected interests, and the locality. In the case of site-specific actions, such as are being proposed here, significance would usually depend upon the effects in the locale rather than in the world as a whole. "Intensity" refers to the severity of the impact.

This chapter is arranged by resource area, as in Chapter 3, Affected Environment. Potential significant impacts on each resource area are described for the Navy's disposal action, the three community reuse alternatives, and the No Action Alternative. The impact analysis compares projected future conditions to the affected environment described in Chapter 3. For each resource area, the factors that were considered in assessing the potential significance of the action's impact are identified. For each identified impact, the relevant factor is listed in parentheses following the title of the impact. In some cases, resource area sections contain a discussion of the methodology and general assumptions used in the environmental impact analysis.

Navy will be responsible for those measures identified in its Record of Decision (ROD) for the proposed conveyance of the property (disposal action). Since reuse would occur after the property is transferred from Federal ownership, implementing the mitigation measures identified for impacts associated with reuse would be the responsibility of the acquiring entity (under the direction of Federal, state, and local agencies with regulatory authority over protected resources), and not Navy. Implementation of mitigation measures would be assured through a Mitigation Monitoring and Reporting Program, which would be adopted by the City of Richmond (City) as required under CEQA.

## 4.1 LAND USE

The Region of Influence (ROI) for land use is NFD Point Molate and the City's West Shoreline Planning Area (Figure 3.1-13).

Factors considered in determining whether an alternative would have a significant impact on land use include the extent or degree to which its implementation would 1) conflict with substantive requirements of any agency that, following property conveyance, would have jurisdiction over the purposes to which the properties are used, 2) result in the nonattainment of that agency's policies, 3) result in proposed uses that are incompatible with existing adjacent land uses, or 4) result in incompatibility between on-site land uses.

### *Land Use under the Community Reuse Alternatives*

As shown in Figure 3.1-1, the predominant land use of NFD Point Molate is Military Administration and Operations, which encompasses the entire property, except for about 5 acres (2 hectares [ha]) of Military Housing (Winehaven cottages) and about 18 acres (7 ha) of shoreline park (part of "Other Dry and Submerged Lands").

Under any of the community reuse alternatives, the existing land uses of the property would be altered (Figure 4.1-1). In general, the combination of new commercial, industrial, and residential land uses would be concentrated near Western Drive, off the steep hillsides, and away from the shoreline. Both the hillside and shoreline areas would be used for open space and recreation. Below is a description of the spatial arrangement of developed land uses as experienced when traveling from south to north on Western Drive through the site. Public access to the site is from the south, off of Interstate 580 (I-580).

Alternative 1, Residential/Commercial is the only alternative that introduces a residential land use (Table 4.1-1 and Figure 4.1-1). Entering the site on Western Drive from the south, there would be a 27-acre (11-ha) parcel of new residential development east of Western Drive (part of the Southern Development Area) in a flat disturbed area that once supported several railroad spurs. Farther north, about a third of the way through the site, there would be an 8-acre (3.2-ha) parcel of new residential development (also part of the Southern Development Area), to the east of Western Drive. This parcel is located at the base of a small swale. Continuing north, near the middle of the site, there would be about 6 acres (2.4-ha) of new residential development (Central Development Area) to the west of Western Drive. This parcel would be located on a bluff. Below the bluff and to the north, there would be a 20-acre (8-ha) parcel of residential/commercial mixed-use development. The parcel would span

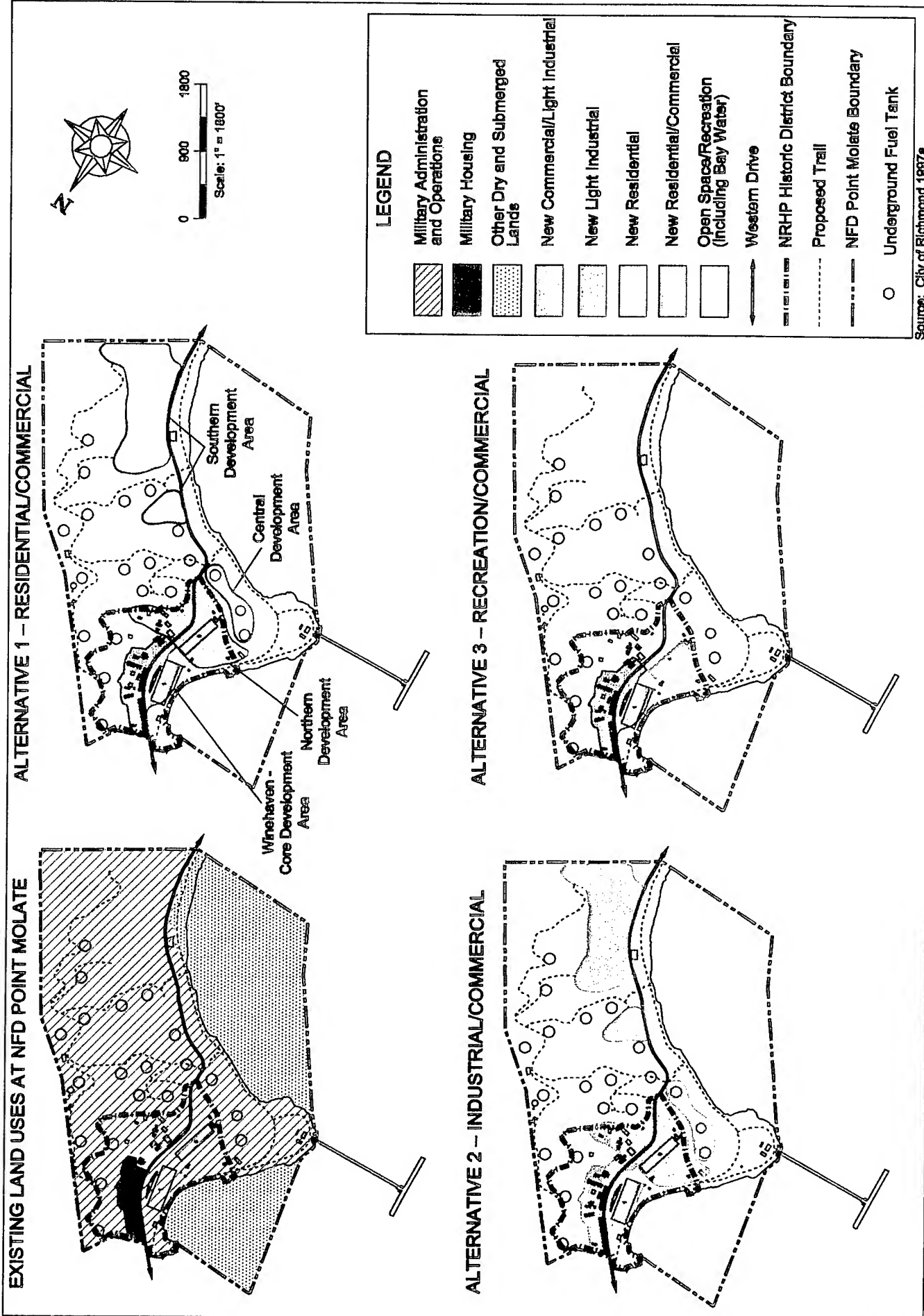


Figure 4.1-1: Existing and Conceptual Community Land Uses by Alternative for the NFD Point Molate Property

TABLE 4.1-1

## LAND USE ACREAGES FOR THE REUSE ALTERNATIVES

LAND USE	EXISTING CONDITION	ALTERNATIVE 1	ALTERNATIVE 2	ALTERNATIVE 3
Military Administration and Operations	290	NA	NA	NA
Military Housing	5	NA	NA	NA
Other Dry and Submerged Lands	118	NA	NA	NA
Commercial	NA	27	27	27
Light Industrial	NA	6	61	8
Residential	NA	55	0	0
Open Space/Recreation (Including Submerged Land)	NA	325	325	378
<b>Total</b>	<b>413</b>	<b>413</b>	<b>413</b>	<b>413</b>

Based on Table D-1 in Appendix D.

NA = Applicable

Western Drive, extending west toward the shoreline and east toward the hillsides, and would be almost entirely within the National Register of Historic Places (NRHP) Historic District. Currently, there are several buildings and treatment ponds in this area. Residential development on these four parcels would total about 730 units on about 55 acres. Next to the 20-acre (8-ha) parcel and to the north, would be the 17-acre (7-ha) Winehaven Core Development Area, which includes the historical Winehaven winery and residential buildings. This parcel would be developed as a mixed-use development of commercial and light industrial uses. Alternative 1 includes 325 acres (131 ha) open space/recreation (including submerged land).

Alternative 2, Industrial/Commercial, would have 11 percent more square footage (1,522,200 versus 1,369,137 square feet) of development than Alternative 1 and no residential use (Table 2.2-1). The same parcels described under Alternative 1 would be developed, but in most cases, for different land uses. Entering NFD Point Molate from the south, the first three parcels on the site (the Southern Development Area and Central Development Area) would be developed for light industry (instead of residential as proposed under Alternative 1). Further to the north, the Northern Development Area would include commercial and light industrial uses. The Winehaven Core Development Area would be developed for commercial and light industrial uses, as proposed under Alternative 1.



Under Alternative 3, most of the parcels would not be developed but would be used for recreation and open space. Entering NFD Point Molate from the south, there would be no new development until one reached the Historic District at the northern end of the site. The Northern Development Area, proposed for commercial and light industrial uses under Alternative 2, would not be developed, except for Building 6, which would be reused for commercial and light industry. Further north, the Winehaven-Core Development Area would be developed for commercial and light industrial uses, as proposed under Alternatives 1 and 2.

The intensity of land use at NFD Point Molate would increase under all the community reuse alternatives, although the greatest intensification would occur under Alternatives 1 and 2 (Table 4.1-1).

An increase in job-generating land uses would occur from the introduction of commercial, light industrial, and some of the proposed open space/recreation uses under all the alternatives. This is consistent with the Draft Reuse Plan vision to "create and attract job and business opportunities" (page I-2, City of Richmond 1997a). It is also consistent with several goals and objectives of the Draft Reuse Plan to "seek to attract growth and business firms," "encourage resident entrepreneurs and small businesses," "maintain and increase the number of new and permanent private sector jobs," "increase investment," "encourage intensified economic activity," and "attract new business and commercial activities" (pages I-10, I-11, City of Richmond 1997a).

The Draft Reuse Plan goals and objectives for residential housing are to "encourage residential entrepreneurs and small businesses" and "encourage residential, commercial, industrial and mixed use development." Alternative 1 is the only alternative that includes multifamily housing as part of mixed-use development.

The open space/recreation land use proposed under all the reuse alternatives would be consistent with the Draft Reuse Plan's vision to "preserve and promote the enjoyment of the natural resources of the area" and with some of the goals and objectives, including "preserve hillsides from further development," "preserve access to the bay and other features," and "provide a variety of open space for outdoor recreation" (page I-2, City of Richmond 1997a). The designated open space under all the reuse alternatives would provide protection of wildlife habitat, visual quality, and public access to the shoreline and hillside areas. It would also offset the effects of land use intensification associated with commercial, light industrial, and residential development.

## **Impact Discussion**

### **Compatibility between On-Site Land Uses**

One Draft Reuse Plan goal and objective is to “provide adequate transition between residential, industrial and commercial areas.” The uses proposed under the alternatives would have adequate buffering, with the exception of the possible need to site a sewage treatment plant near land uses that could be sensitive to this use. Another exception could be the potential use of the Winehaven area as an active winery operation, which could also affect sensitive land uses.

The capacity of the existing sewage treatment plant would need to be expanded to support the proposed uses under Alternative 1 (See Section 4.12, Utilities) and modified and upgraded to accommodate the uses proposed under Alternatives 2 and 3. If the plant were to expand at its present location, it could be surrounded by proposed residential and light industrial uses, and it would be within the proposed shoreline park under any of the three reuse alternatives. Odors from a sewage treatment plant could result in land use conflicts between the facility and surrounding uses (see Section 4.10, Air Quality). If the sewage treatment facility were relocated, it could also be near proposed residential or light industrial uses. Facility site selection criteria specify that a site would need to consist of 1 to 2 acres (0.4 to 0.8 ha) of low elevation land (near the San Francisco Bay [Bay]) outside of the San Francisco Bay Conservation and Development Commission (BCDC) jurisdiction and avoiding sensitive biological habitat.

The use of the Winehaven buildings for an active winery operation could generate substantial odors from grape processing and fermentation, causing a nuisance to land uses nearby. A mixture of land uses are envisioned for the village area where the Winehaven buildings are located, including commercial, light industrial, residential, and open space/recreation, depending on the reuse alternative. The residential use would be the most sensitive receptor to odors.

In the Draft Reuse Plan, buffering is proposed between light industrial and other uses, and the shoreline park could act as a buffer. However, the adequacy of this buffering and potential increased distance between odor-generating uses, such as a sewage treatment plant or active winery, and other land uses, in particular residential, would need to be considered when specific projects are proposed. See Section 4.10, Air Quality, for a discussion of odor impacts associated with on-site activities.

### **Compatibility between On-Site Land Uses and Off-Site Land Uses**

The heavy industrial uses of the Chevron property surrounding NFD Point Molate were consistent with use of NFD Point Molate as a fuel storage depot. However, the proposed introduction of a substantial amount (55 acres [22 ha]) of residential

development under Alternative 1 could lead to land use conflicts due to exposure to environmental, health, and safety risks associated with adjacent industrial operations (see Section 3.1.2 for a description of surrounding land uses).

There could be incompatibilities between on-site residential uses and adjacent off-site industrial land uses due to the presence of objectionable odors, hazardous materials, and (in the case of an accidental release at Chevron or General Chemical) toxic substances on adjacent lands. There could also be incompatibilities associated with the use of Western Drive (the only access route along the west side of the San Pablo Peninsula [peninsula]) for transporting industrial materials to and from the Port of Richmond Terminal No. 4 and the quarry. Conflicts between residential and heavy industrial uses could result in increased regulatory control or curtailment of the existing industrial activities on the peninsula.

Development of residential housing, which entails 24-hour occupation, as well as commercial and light industrial uses, would increase the population potentially affected by accidental airborne releases of toxic substances from Chevron's Richmond Refinery (refinery) or General Chemical's Richmond Facility (chemical plant). While the refinery is on the other side of the roughly 400-foot (152-meter [m]) high Potrero Ridge, and the ridge could to some degree act as a physical barrier, it might not prevent the movement of airborne material or fire up and across the ridge line to NFD Point Molate under all meteorological conditions. The Draft Reuse Plan states that "Although prevailing winds are to the east, in the event of an industrial accident, such as an explosion, during an infrequent period when the wind blows in the opposite direction, residents from any future approved residential uses, employees, and visitors, to Point Molate could potentially be exposed to toxic fumes or firespread" (page I-14, City of Richmond 1997a).

The community reuse alternatives would increase the number of residents, employees, and visitors at NFD Point Molate to more than 2,000 under Alternative 1, 223 under Alternative 2, and 127 under Alternative 3 (Section 4.3), as compared with the 90 people that resided there when the base was active (Section 3.1). The residential land use would be the most sensitive to potential impacts from off-site land uses, since residents would have 24-hour occupancy (longer than any other use) and are more likely to include sensitive receptors, such as children and the elderly. Employees associated with light industrial and commercial uses would have shorter lengths of stay (typically eight hours), would tend to be inside for the majority of that time period, and typically would be better prepared for accidents and emergencies than residents. There would also be commercial and recreational visitors. These visitors are assumed to have a shorter length of stay on average than workers or residents, and the majority of recreational use would occur on weekends and holidays.

Development of commercial and light industrial uses, as well as residential housing, would increase the population potentially affected by accidental airborne releases of toxic substances from the adjacent refinery or nearby chemical plant. Under Alternatives 1 and 3, the nearest commercial or light industrial use would be about 0.3 miles (0.5 kilometer [km]) from the closest refinery tank and about 1.5 miles (2.4 km) from the main refinery operations. Under Alternative 2, the nearest commercial or industrial use would be about 0.27 miles (0.43 km) from the closest refinery tank and about 0.8 miles (1.3 km) from the main refinery operations. The nearest residence (Alternative 1 only) would be about 0.27 miles (0.43 km) from the closest refinery tank and about 0.8 miles (1.3 km) from the main refinery operations. The nearest recreational area would be about 0.1 miles (0.2 km) from the closest refinery tank and about 0.7 miles (1.1 km) from the main refinery operations.

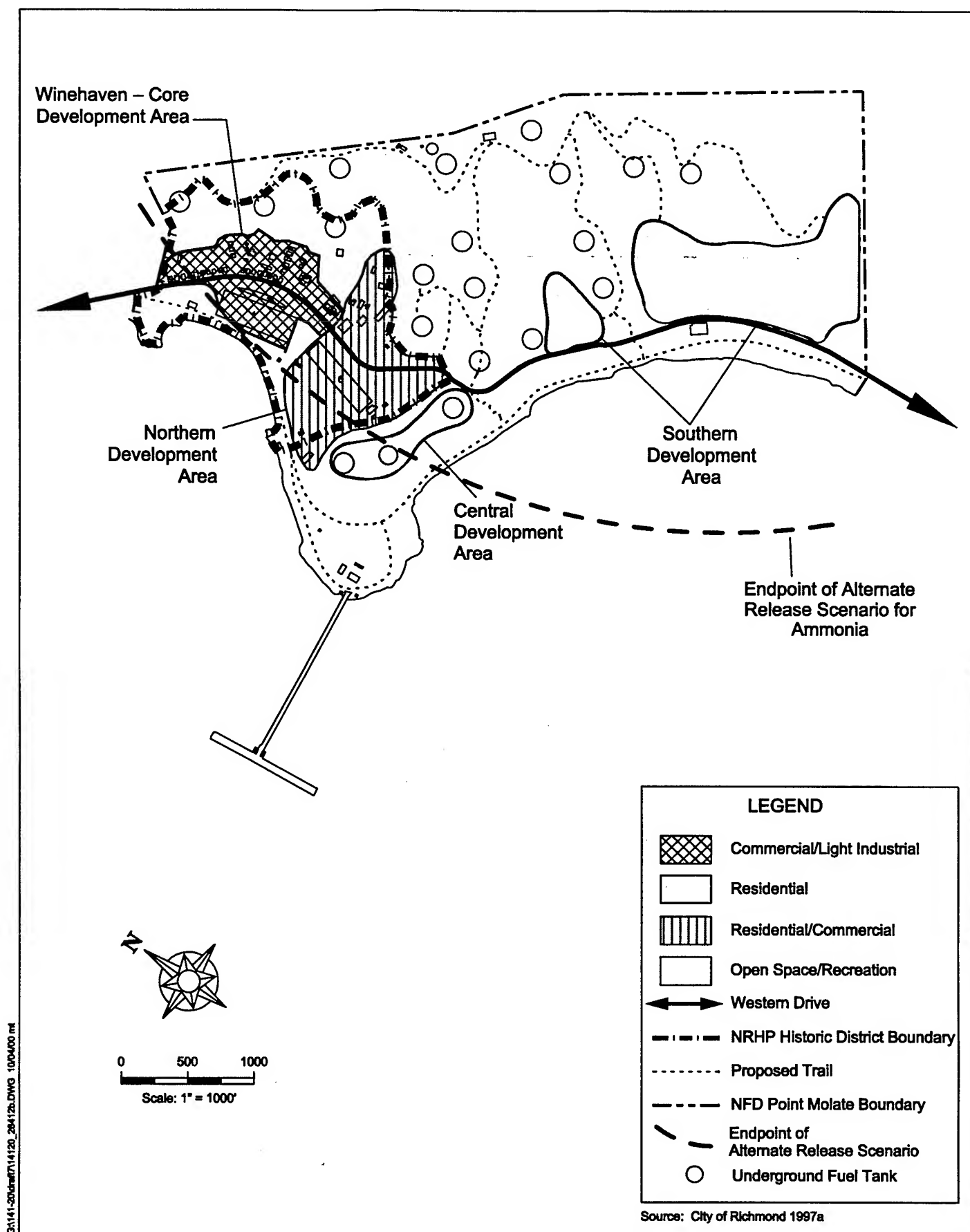
Over the past five years, the refinery has reported three accidents: one accident on March 12, 1999, had off-site impacts. On July 26, 1993, 6.7 tons (6.1 metric tons) of 35 percent oleum were released to the air from a tank car at the chemical plant.

As described in Section 3.1.2, the California Accidental Release Prevention Program requires that facilities using or storing toxic and flammable substances prepare a Risk Management Plan (RMP). The refinery's RMP indicates that all of NFD Point Molate is within the scenario circle for ammonia under the Worst-Case Scenario (WCS). Under the Alternate Release Scenario (ARS) for ammonia, about three-quarters of NFD Point Molate, including all of the Southern Development Area and most of the Central and Northern Development Areas, is within the scenario circle (Figure 4.1-2). The chemical plant's RMP indicates that all of NFD Point Molate is within the scenario circle for oleum under the WCS (Figure 3.1-10). NFD Point Molate is not within the ARS for oleum.

Wind pattern data indicate that about 87 percent of the time, NFD Point Molate is upwind of the refinery, and 99 percent of the time NFD Point Molate is upwind of the chemical plant. Conversely, about 13 percent of the time, NFD Point Molate is downwind of the refinery; about one percent of the time, NFD Point Molate is downwind of the chemical plant (BAAQMD 1999c).

The refinery's RMP also shows that the western two-thirds of NFD Point Molate would be within the WCS for an accidental release (explosion) of flammable substances. Unlike ammonia, an explosion would not be affected by wind patterns. Therefore, if an accidental release of flammable substances at the refinery occurred, a part of NFD Point Molate could be affected (Figure 3.1-10).

Accidental releases discussed in the RMPs are from refinery or chemical plant operations and not associated with existing or proposed land uses at NFD Point Molate.



The issue addressed here is not the potential for proposed uses at NFD Point Molate to cause accidental releases (no heavy industrial uses are proposed), but the potential impact of accidental releases from the refinery and chemical plant on people at NFD Point Molate under the reuse alternatives. This is an issue of placing land uses in a location subject to potential large-scale accidental releases of airborne toxics, and is, therefore, addressed as a land use incompatibility issue, rather than an air quality issue.

In response to the possibility of accidental releases, Contra Costa County operates a Community Warning System. In the event of an emergency involving a chemical accident, the Community Warning System activates a system of safety sirens. The warning system instructs people to shelter in place when the safety sirens are activated. The current warning system does not provide siren coverage for NFD Point Molate.

#### Consistency with Plans and Policies

*McAteer-Petris and Coastal Zone Management Acts.* The BCDC San Francisco Bay Plan (Bay Plan) designates NFD Point Molate as a "Waterfront Park, Beach." BCDC Bay Plan direction is that designated parks should, wherever possible, include hiking, bicycling, riding trails, picnic facilities, viewing locations, beaches, and fishing facilities. BCDC jurisdiction encompasses a 100-foot (30-m) wide zone inland and parallel to the mean high tide line. The inland shoreline park boundary generally coincides with the mean high tide line.

All the community reuse alternatives include waterfront trails or promenades along the entire length of shoreline. All the alternatives also propose commercial recreation uses near the base of the pier, within BCDC jurisdiction. Commercial recreation uses could include a waterfront café, boating center, watercraft rental, seafood and produce market, and a public market. Some of these uses could be inconsistent with BCDC's "Waterfront Park, Beach" designation, since in the Bay Plan, commercial uses are considered an inconsistent use. Therefore, specific project proposals would require BCDC review and approval. If approved, BCDC would need to amend the Bay Plan "Waterfront Park, Beach" designation to include the allowed commercial uses. Since the general intent of the three community reuse alternatives is to provide public shoreline access, the alternatives are consistent with the BCDC Bay Plan.

*State Lands Commission.* As described in Section 3.1, tidelands and submerged lands within the NFD Point Molate boundary, as well as the submerged lands beneath the T-shaped pier, are subject to the State Lands Commission (SLC) public trust jurisdiction. State law requires that all tidal trust lands be used for maritime-related commerce, navigation, fisheries, water-oriented recreation, or open space. All three of the community reuse alternatives propose use of the shoreline and pier for public access and recreation, which are consistent with the uses set forth in state law. Specific project

proposals would require SLC review to ensure that inconsistent land uses that include residential, institutional, non-maritime-related commercial, and mixed uses are not proposed on public trust lands.

*Association of Bay Area Governments.* The Association of Bay Area Government's (ABAG) Bay Trail Plan designates a spur trail to follow the western shoreline of San Pablo Peninsula to the Point San Pablo Yacht Harbor. At NFD Point Molate, the trail would run the entire length of the property near the shoreline. All of the community reuse alternatives propose a shoreline trail and promenade within a shoreline park area that would extend the entire length of the NFD Point Molate property. Although the exact location of the trail and promenade within the shoreline park area has not been identified, it would be consistent with ABAG's Bay Trail Plan alignment for NFD Point Molate.

*East Bay Regional Park District.* The East Bay Regional Park District's (EBRPD) Master Plan supports ABAG's Bay Trail Plan. As discussed above, all of the community reuse alternatives propose a shoreline trail and promenade within a shoreline park area that would extend the entire length of the NFD Point Molate property. Therefore, all three community reuse alternatives would be consistent with EBRPD's Master Plan.

*City of Richmond General Plan and Zoning Ordinance.* NFD Point Molate is located in the West Shoreline Planning Area of the City. The *Richmond General Plan* (General Plan) and *City of Richmond Zoning Ordinance* (Zoning Ordinance) identify land use and zoning designations for NFD Point Molate as described in Section 3.1.4. General Plan land use designations are Port/Marine Terminal/Ship Repair, Recreation Lands/Subcategory Community Open Space, and Other Types of Open Space. Zoning designations are Marine Industrial and Community and Regional Recreation.

Following conveyance of NFD Point Molate from a Federal to a non-Federal entity, future development of the site would be under City jurisdiction. The General Plan land use designations for the property would apply. The General Plan would need to be amended to incorporate the land uses proposed in the Draft Reuse Plan. A General Plan amendment is not part of the proposed action. Land use designations considered in the General Plan Amendment could include commercial, light industrial, residential, and open space/recreation. A Specific Plan, which would be more detailed and comprehensive than the conceptual Draft Reuse Plan, would likely be the vehicle for developing these amendments. However, there is no City policy dictating when a Specific Plan should be prepared. A Specific Plan is appropriate for the NFD Point Molate property because of its large size and the possibility that a number of developers could be involved in the development of projects there.

Land Use Policy 0.7 states “avoid land uses that place residential dwellings with ‘heavy’ industrial and maritime uses.” The existing Heavy Industrial zoning on the peninsula is defined as being “...potentially incompatible with most other establishments and is generally found in areas which are distant from residential areas...” Immediately surrounding most of NFD Point Molate is a “Recreation Lands” land use designation (Figure 3.1-12) and a “Community and Regional Recreation” zoning designation (Figure 3.1-13). These designations form open space buffers of varying widths around most of NFD Point Molate. A part of the southern NFD Point Molate property boundary abuts an area with Heavy Industrial land use and zoning (M-3) designations, and the northern property boundary abuts an area that is zoned Marine Industrial (M-4) but has a land use designation of Recreation Lands. Beyond these buffers are Port/Marine Terminal/Ship Repair and Heavy Industrial land use designations and Marine Industrial and Heavy Industrial zoning designations.

#### 4.1.1 Navy Disposal Action

The disposal of NFD Point Molate property out of Federal ownership would not result in any impacts on land use.

#### 4.1.2 Community Reuse Alternatives

##### *Alternative 1: Residential/Commercial*

##### **Significant Unmitigable Impact**

*Impact: Incompatibility between On-Site Land Uses and Adjacent Off-Site Land Uses (Factor 3).* Introduction of a residential land use component under Alternative 1 would be incompatible with the heavy industrial uses of the adjacent refinery and nearby chemical plant due to the potential exposure of future residents to accidental releases of toxic substances from the refinery and chemical plant (Table 3.1-1). All of NFD Point Molate would be within the toxic endpoint of a WCS for ammonia, and about three-quarters of the property would be within an ARS for ammonia from the refinery. Two-thirds of the site would be within the WCS endpoint for flammables from the refinery. All of the site would be within the WCS toxic endpoint for oleum from the chemical plant. Release scenarios are illustrated in Figures 3.1-9 and 3.1-10 and summarized below in Table 4.1-2.

There are no established Federal standards for determining the impact significance of exposure of people at NFD Point Molate to accidental releases of acutely hazardous materials. However, local standards have been established by the Bay Area Air Quality Management District (BAAQMD) in its guidance for assessing air quality impacts (BAAQMD 1999b). BAAQMD recommends that any project resulting in sensitive



TABLE 4.1-2

**ACUTELY HAZARDOUS MATERIALS FOR WHICH NFD POINT MOLATE IS  
WITHIN RMP ACCIDENTAL RELEASE ENDPOINT**

SITE	AMMONIA		FLAMMABLES		OLEUM	
	ARS	WCS	ARS	WCS	ARS	WCS
Refinery	X	X	-	X	-	-
Chemical Plant	-	-	-	-	-	X

Source: Chevron 1999 and General Chemical 1999.

ARS = Alternative Release Scenario

WCS = Worst Case Scenario

X = NFD Point Molate is within endpoint

- = NFD Point Molate is not within endpoint

receptors<sup>1</sup> being within the Emergency Response Planning Guidelines (ERPG) exposure level 2<sup>2</sup> for a facility be found to have a significant impact. The Risk Management Prevention Program (RMPP) is a state program that has been superseded by the Federal Risk Management Program. This Federal program addresses procedures to improve the management of hazardous substances, but does not establish standards for environmental impact assessment. The RMP uses toxic endpoints (boundary defined by the "scenario circle") rather than the ERPG terminology<sup>3</sup>. Although BAAQMD has not yet revised the guidelines to reflect the replacement of the RMPP by the Federal Risk Management Program, use of the Federal program terminology and impact criteria in place of the RMPP terminology and impact criteria is appropriate (BAAQMD 2000a).

NEPA and CEQA both require the consideration of impact significance on the basis of "reasonably foreseeable" adverse effects. Further, standard CEQA practice is to focus on reasonable worst-case analysis, considering the potential magnitude and frequency of the event. Although the probabilities of occurrence of the WCS or ARS have not been quantified, both scenarios are possible. The WCS is an absolute worst-case scenario, while the ARS is considered to be a more likely release scenario. On the basis of these

<sup>1</sup> BAAQMD guidance defines sensitive receptors as "...facilities that house or attract children, the elderly, people with illnesses or others who are especially sensitive to the effect of air pollutants. Hospitals, schools, convalescent facilities, and residential areas are examples of sensitive receptors."

<sup>2</sup> ERPG exposure level 2 is defined as "the maximum airborne concentration below which it is believed that nearly all individuals could be exposed for up to one hour without experiencing or developing irreversible or other serious health effects or symptoms which could impair an individual's ability to take protective action."

<sup>3</sup> For ammonia and oleum, the toxic endpoint is equal to the ERPG-2 value.

descriptions, the ARS fits more closely with a “reasonably foreseeable worst case” significance threshold than does the WCS.

Development of the residential component proposed under Alternative 1 would be incompatible with the adjacent refinery, if it resulted in exposure of sensitive receptors to potential accidental releases of ammonia under an ARS. The Southern Development Area and most of the Central and Northern Development Areas, which are proposed for residential development, lie within the ARS impact circle for ammonia as developed in Chevron’s RMP (Chevron 1999). Residential development proposed for other areas of the property lies outside the ARS impact circle for ammonia. Therefore, based on local standards established by the BAAQMD, a potential significant impact has been identified related to proposed residential development in the Southern Development Area and most of the Central and Northern Development Areas, which are proposed for residential development.

BAAQMD guidelines state that mitigation measures for accidental releases (such as disclosure statements, sealing of buildings, community alert procedures) that are targeted at potential receptors are not appropriate mitigations to be used in lieu of buffer zones or technical controls. BAAQMD considers an adequate buffer to be one that excludes receptors from the scenario circles (BAAQMD 2000a). Since the Southern Development Area and most of the Central and Northern Development Areas lie within the ARS impact circle for ammonia, it would not be physically possible to provide an adequate buffer between sensitive receptors in these areas and the off-site sources of potential accidental releases. Therefore, the potential significant impact related to proposed residential development in these areas is considered unmitigable.

#### **Significant and Mitigable Impacts**

*Impact 1: Incompatibility between On-Site Land Uses (Factor 4).* Expansion of the existing sewage treatment plant or construction of a new sewage treatment plant, as well as the possibility of a winery operation on site, could result in incompatibility between these land uses and other development on-site. This is a significant and mitigable impact.

*Mitigation 1.* Site the sewage treatment plant, winery operations, and other development that could adversely affect residential or commercial uses away from other on-site development so that odors from sewage treatment, a winery, or other operations do not adversely affect these developments.

*Impact 2: Inconsistency with Plans and Policies (Factors 1 and 2).* The residential land use proposed under Alternative 1 would not be consistent with Richmond General Plan land use policies and zoning ordinances that promote separation of residential land uses from heavy industrial and maritime uses. While the open space/recreation lands at

NFD Point Molate combined with adjacent open space lands of the refinery would provide some separation between the refinery operations and proposed residences, it would not be adequate separation to reduce the potential risk of an accidental release of toxic substances to a sensitive receptor (residential areas) as discussed above. This is a significant and mitigable impact.

*Mitigation 2.* Modify the Richmond General Plan and Zoning Ordinance to allow placement of residential dwellings with heavy industrial and maritime uses at NFD Point Molate. Expand, refine, or eliminate the land use policies and zoning ordinances discussed in Section 3.1.3 that advocate separation of residential land uses from heavy industrial and maritime uses.

***Alternative 2: Industrial/Commercial***

**Significant and Mitigable Impact**

*Impact: Incompatibility between On-Site Land Uses (Factor 4).* This impact is the same as described for Alternative 1.

*Mitigation.* Mitigation is the same as described for Alternative 1, except that Alternative 2 would not have residential use.

**Less Than Significant Impact**

*Incompatibility between On-Site Land Uses and Adjacent Off-Site Land Uses (Factor 3).* The proposed commercial component could have a small hotel use, short-term lodging, bed and breakfast, and/or retreat center. There would be no residential land use. Because these uses would involve only short-term overnight stays, the potential for sensitive receptors, such as children and the elderly, to be exposed to accidental airborne releases of toxic substances would be very low. Therefore, land use conflicts with off-site heavy industrial uses would be considered a less than significant impact. No mitigation is required.

***Alternative 3: Recreation/Commercial***

**Significant and Mitigable Impact**

*Impact: Incompatibility between On-Site Land Uses (Factor 4).* This impact is the same as described for Alternative 1.

*Mitigation.* Mitigation is the same as described for Alternative 1, except that Alternative 3 would not have residential use.

Implementation of Alternative 3 would result in no other land use impacts.

**4.1.3 No Action Alternative**

Under the No Action Alternative, NFD Point Molate would remain a closed Federal property and would not be reused or redeveloped. No impacts on land use are anticipated, and no mitigation is required.

## 4.2 VISUAL RESOURCES

The ROI for visual resources is the NFD Point Molate property and public areas from which it can be seen.

Factors considered in determining whether an alternative would have a significant impact on visual resources include the extent or degree to which its implementation would 1) reduce scenic quality within the ROI, as seen from any public view or viewpoint or 2) damage scenic resources, including, but not limited to trees, rock outcroppings, and historic buildings.

### *Impact Discussion*

#### **Scenic Quality**

Under the three community reuse alternatives, almost all of the existing buildings located within the Historic District would remain, including the cottages and the Winehaven buildings. Other buildings along the shoreline could be reused, such as the sewage treatment plant, buildings at the end of the pier, and the two quonset huts near Point Molate Beach Park. Most of the other buildings and structures are proposed for demolition. Figures 8 and 9 from the Draft Reuse Plan, reproduced in Appendix C, illustrate the community reuse alternatives.

Under Alternative 1, new development is proposed in areas that have been previously disturbed. No new structures are proposed for the Winehaven Historic District. Immediately south of the core Historic District, but within the existing village area of the NFD Point Molate property, 109 units of single-family, two-story housing is proposed as part of a mixed-use development that would also include light industrial and commercial uses. South of the village area, on the bluff above the point of land known as Point Molate (the Point), 120 units of multifamily housing are proposed as three-story townhouses or condominiums. Further south, to the east of Western Drive, there are two level, disturbed but undeveloped, areas of the property that are proposed for new residential development. The 4-acre (2-ha) area would support 100 units of two-story multifamily housing, and the 27-acre (11-ha) area would support 324 units of two-story single-family homes.

Under Alternative 2, the areas described above for residential development under Alternative 1 would be developed as light industrial uses. In general, the intensity and scale of light industrial development would be similar, or less intensive, than under Alternative 1. Under Alternative 3, the areas of new development described for Alternatives 1 and 2 would not be developed but would be used for recreation and open space. Under all the reuse alternatives, some new development could be associated

with recreation activities in the shoreline park area, such as a café or restaurant, recreation rental facilities, fishing facilities, or an open-air amphitheater.

All the community reuse alternatives would protect the visual quality of the NFD Point Molate property primarily through the preservation of the steep hillsides (slopes greater than 15 percent) as open space and the Bay shoreline as a park. In addition, new development would be nestled in the existing village area or clustered in separate and relatively small parcels (4 to 27 acres [2 to 11 ha]) of development. In general, new and existing development would be adjacent to or near Western Drive, concentrating development between the shoreline and hillsides. Many of the existing historic buildings would be retained, contributing to the visual character of the property. The architectural design of new buildings would be complimentary to the historic structures on the property in terms of scale, density, and design elements; this would reduce visual contrasts associated with the introduction of new structures onto the property. New development would not dominate the visual character of the NFD Point Molate property, because most structures would be one or two stories, and none would be higher than three stories.

Under Alternative 1, near-, middle-, and distant-range views of NFD Point Molate from public viewing locations would be altered, and the density and scale of development at the NFD Point Molate property would increase. Visual contrasts between the surrounding landscape and developed areas would intensify, and the property would be more noticeable within the viewshed. Development in the north area of the site would be integrated with existing structures; residential development on the bluff above the Point would be partially screened by existing vegetation; and residential development at the south end of the site would be concentrated in two relatively flat areas at the base of the slope.

Under Alternative 2, views of the NFD Point Molate property from public viewing locations would be similar to those under Alternative 1. Light industrial development would replace the areas of residential use under Alternative 1. This development would most likely be predominantly two- and three-story structures. Structures would be bulkier, but there would be fewer of them. There would be fewer access roads off of Western Drive, but more parking or paved areas.

Under Alternative 3, the site would look most similar to its existing appearance. There would not be a substantial number of new structures or other site development such as parking.

### Scenic Resources

Under the three community reuse alternatives, most of the historic buildings within the Historic District would remain. The architectural design of new buildings would be harmonious with the existing historic structures. Trees and geologic features would not be significantly affected, because under Alternatives 1 and 2, new development would occur in areas previously disturbed.

### Consistency with Plans and Policies

*BCDC San Francisco Bay Plan.* The Bay Plan (BCDC 1998) was considered in the development of the Draft Reuse Plan; therefore, the community reuse alternatives are consistent with Policies 2, 4, 8, and 14 (see Section 3.2.3). All of the community reuse alternatives would provide public access to the shoreline and hillsides, which would enhance viewing of the Bay, thereby being consistent with Policy 2. Most development proposed under the alternatives would be sited away from the Bay and off the steep slopes, thereby reducing visual impacts of development as suggested in Policy 4. By clustering development and siting some of the new development on the east side of Western Drive, the alternatives would maintain views of the Bay from Western Drive as discussed in Policies 8 and 14.

The community reuse alternatives could be consistent with Policies 1 and 12, but these policies are more applicable to project-specific proposals. Policy 1 calls for development of the shoreline in accordance with BCDC's Access Design Guidelines. This could occur when specific project designs for the shoreline park are considered. Similarly, Policy 12 calls for continued BCDC review of shoreline development. BCDC consultation could occur when specific project designs are developed for the shoreline park.

*City of Richmond General Plan.* The community reuse alternatives are consistent with the policies of the General Plan discussed in Section 3.2.3. Development of a shoreline park under all the community reuse alternatives would avoid the need for substantial dredging or filling of the Bay. This would be consistent with Policy OSC-B.1, which discourages activities that could adversely affect the aesthetic character of the site. Policies OSC-F.1 and OSC-G.3 are similar and call for the protection of hills, ridges, and other features through the design and siting of buildings and facilities. The clustering and siting of development away from the shore and off of steep slopes, as well as the limitations on building height to three stories under the community reuse alternatives, would be consistent with these policies. Policy OSC-B.2 calls for measures to mitigate aesthetic impacts. The reuse alternatives would be consistent with this policy, because visual impacts would not occur under the reuse alternatives.

**4.2.1 Navy Disposal Action**

The disposal of NFD Point Molate out of Federal ownership would not result in any impacts on visual resources.

**4.2.2 Community Reuse Alternatives*****Alternative 1: Residential/Commercial*****Less Than Significant Impacts**

*Reduction of Scenic Quality (Factor 1).* Alternative 1 would not significantly obstruct or degrade scenic views. Changes to scenic views would be less than significant. No mitigation is required.

*Damage to Scenic Resources (Factor 2).* Alternative 1 would not significantly damage scenic resources (historic buildings, trees, or unique geologic features) or the two scenic routes within the ROI (Western Drive and I-580 [Richmond-San Rafael Bridge]). No mitigation is required.

***Alternative 2: Industrial/Commercial*****Less Than Significant Impacts**

*Reduction of Scenic Quality (Factor 1).* This potential impact would be similar to that identified for Alternative 1. No mitigation is required.

*Damage to Scenic Resources (Factor 2).* This potential impact would be similar to that identified for Alternative 1. No mitigation is required.

***Alternative 3: Recreation/Commercial***

Alternative 3 involves minimal new development. No impact on visual resources is anticipated. No mitigation is required.

**4.2.3 No Action Alternative**

Under the No Action Alternative, NFD Point Molate would remain a closed Federal property and would not be reused or redeveloped. No impacts on visual resources are anticipated, and no mitigation is required.



### 4.3 SOCIOECONOMICS

The ROI for population, employment and income, and housing is the City and Contra Costa County. For schools, the ROI is the West Contra Costa Unified School District (WCCUSD).

Factors considered in determining whether an alternative would have a significant impact on socioeconomics include the extent or degree to which its implementation would 1) induce growth or concentrations of population, 2) create a demand for additional housing in the City, 3) cause a decrease in local or ROI employment, or 4) generate student enrollment that exceeds the capability of responsible authorities to accommodate.

#### *Impact Discussion*

Employment impacts are analyzed against existing socioeconomic conditions for the period when NFD Point Molate was in full operation, as well as against current and projected conditions where applicable. Secondary impacts of increased population and housing growth (for example, traffic, air quality, and noise impacts) are addressed in those respective sections of this document. Growth-inducing impacts are addressed in Section 5.5.

#### **Population**

Under Alternative 1, the proposed housing would accommodate a population increase of about 2,000 people. This represents about 2 percent of the City's population. Because Alternatives 2 and 3 do not propose housing, the population would remain the same.

#### **Housing**

Reuse would add either 730 housing units (Alternative 1) or no housing units (Alternatives 2 and 3) to the City. Under Alternative 1, the housing stock would be a mix of 433 single-family units, 220 multifamily units, and 77 live-work units. The increased housing under Alternative 1 would be an increase of about 2 percent in the City's existing housing stock. This increase would not substantially alter the City's jobs/housing balance, which is near equilibrium (ABAG 1997).

#### **Employment**

The reuse alternatives would increase the number of permanent jobs at the NFD Point Molate property to between 127 and 223 (depending on the reuse alternative), as compared to 103 jobs when the base was active. The addition of these jobs in the City would represent a small (less than 0.4 percent) increase in the City's over 30,000 existing jobs.

Workers that would be associated with the reuse alternatives are expected to be from both the City and nearby communities. It is unlikely that significant numbers of workers would relocate for jobs on the property. Because the City has a relatively high unemployment rate compared with the overall Bay Area, the addition of reuse-generated jobs could have a small beneficial effect on employment in the City.

#### Schools

Because of its residential component, only Alternative 1 is expected to generate students in schools serving the NFD Point Molate area. The middle and high schools serving the area have adequate capacity to serve projected total enrollments, including the proposed reuse alternatives (Table 4.3-1). However, under Alternative 1, the local grade school, Washington Elementary School, would exceed its capacity by about 70 percent (242 students). This would be a significant impact requiring mitigation, such as expansion of school facilities, which could include the use of portables.

**TABLE 4.3-1**  
**ALTERNATIVE 1: SCHOOL CAPACITIES AND ENROLLMENTS**

SCHOOL	STUDENT CAPACITY	1998/1999 ENROLLMENT	PROJECT-GENERAGED STUDENTS	PROJECTED TOTAL ENROLLMENT*
Washington Elementary School	348	371	219	590
Portola Middle School	1,140	987	45	1,032
Kennedy High School	1,348	1,080	114	1,194

Source: WCCUSD 1999.

\*Assumes full development of Alternative 1 housing but does not include attendance growth from existing housing stock or additional development in the City.

#### Consistency with Plans and Policies

Project developer(s) would be required to pay the state-mandated fee for residential development. SB 50 does not allow cities to impose additional mitigation.

The proposed reuse alternatives would establish new commercial and industrial uses that would be consistent with, and help to implement, the City's policies to maintain and increase the number of new permanent, private-sector jobs available to City residents; encourage new jobs with increased pay scales; and alleviate unemployment and underemployment of residents (Policy ED-A.1-8, Goals ED-B, C, D, and F). The project's commercial and industrial uses also would help to implement policies to enlarge and diversify the City's revenue base, increase and accelerate new commercial development, and upgrade existing industrial development (Goals ED-B, C, D, and F).

Alternative 1 would be consistent with policies encouraging the City to make available a wide range of housing types (Goal ED-1); provide a reasonable opportunity for people to live and work within a defined area, which generally encompasses the City's sphere of influence (Goal GM-E; Policy GM-E.1-4); and make decent, safe, and affordable housing available to existing and future Richmond residents (Goals HG-A and D and Policies HG-A.1-11 and HG-B.1-8). Alternatives 2 and 3 would not contribute to implementation of policies to increase residential opportunities but would not conflict with those policies either. All of the community reuse alternatives would provide community facilities and open space, commercial services, and amenities. These amenities would require private vehicles to access them. Because transit services are not proposed at this time, the community reuse alternatives would not comply with Policy HG-D to provide neighborhood access to amenities from all neighborhoods.

#### 4.3.1 Navy Disposal Action

The disposal of NFD Point Molate out of Federal ownership would not result in any impacts on socioeconomics.

#### 4.3.2 Community Reuse Alternatives

##### *Alternative 1: Residential/Commercial*

##### **Less Than Significant Impacts**

*Population Growth (Factor 1).* The addition of housing under this alternative would result in a population increase of about 2,000 people, or 2 percent of the City's population. This is a less than significant impact. No mitigation is required.

*Additional Housing Demand (Factor 2).* Alternative 1 would add 730 housing units to the City. This would improve the City's jobs/housing balance. No mitigation is required.

*Employment (Factor 3).* Alternative 1 would create approximately 140 permanent new jobs and 110 temporary construction jobs. These jobs would be associated with the conference center, restaurants, community services, and commercial uses. These jobs are considered economically beneficial to the City. No mitigation is required.

*Increased Demand for Schools (Factor 4).* The new housing proposed under this alternative would result in an estimated generation of 219 elementary school students, 45 middle school students, and 114 high school students (Table 4.3-1). Washington Elementary is currently over its capacity by 7 percent (23 students). Under Alternative 1, the school would exceed its capacity by 70 percent (242 students). Of this increase, 63 percent (219 students) would result from the new housing proposed. Portola Middle School and Kennedy High School would still operate within their student capacities. Development fees received under Level Two would fund 50 percent of school facility needs. No mitigation is required.

**Alternative 2: Industrial/Commercial****Less Than Significant Impact**

*Employment (Factor 3).* This alternative would create approximately 223 permanent new jobs and 110 temporary construction jobs. The jobs associated with this alternative would be created through new light industries and commercial uses. These jobs are considered economically beneficial to the City. No mitigation is required.

**Alternative 3: Recreation/Commercial****Less Than Significant Impact**

*Employment (Factor 3).* This alternative would create approximately 127 permanent new jobs and up to 110 temporary construction jobs. These jobs would be associated with commercial and light industrial uses. These jobs are considered economically beneficial to the City. No mitigation is required.

**4.3.3 No Action Alternative**

Under the No Action Alternative, NFD Point Molate would remain a closed Federal property and would not be reused or redeveloped. No impacts on socioeconomics are anticipated, and no mitigation is required.

## 4.4 PUBLIC SERVICES

The ROI for public services is the City, including the NFD Point Molate property.

Factors considered in determining whether an alternative would have a significant impact on public services include the extent or degree to which its implementation would require a level of service beyond the capability of the public service provider.

### *Impact Discussion*

When NFD Point Molate was in operation, Navy provided public services at the NFD Point Molate property. At that time, the NFD Point Molate property, which excludes the Western Drive right of way, was under Federal jurisdiction and law enforcement. However, Western Drive was, and continues to be, under state and local jurisdiction and law enforcement. The property has concurrent jurisdiction, which allows enforcement of Federal, state, and local laws on the property by Federal, state, and local authorities. The City currently provides adequate police and fire services for the caretaker status of the NFD Point Molate property through a cooperative agreement with Navy. However, these services would not be adequate for the level of development proposed under the community reuse alternatives.

The NFD Point Molate fire station, a two-bay, single-story structure with living quarters for nine personnel, is being considered for re-activation under all of the reuse alternatives.

### **Consistency with Plans and Policies**

Following conveyance of Federal property to a non-Federal entity, future development of the NFD Point Molate property would be under City jurisdiction. Developers would be required to comply with the policies and standards regarding Fire/Disaster/Emergency Services that are set forth in the General Plan. For example, adequate fire equipment, fire breaks, facilities, water (with sufficient pressure [minimum 1,500 gallons per minute (gpm), or 5,700 liters per minute (lpm)] and emergency backup systems), and access would be provided for quick and efficient response. Detailed standards that would be met by project facilities are provided in Section 3.4.3. The Richmond Fire Department (RFD) would be responsible for enforcing the laws and ordinances governing building design and equipment requirements for detecting, restraining, and extinguishing fires.

#### **4.4.1 Navy Disposal Action**

The disposal of NFD Point Molate out of Federal ownership would not result in any impacts on public services.

#### 4.4.2 Community Reuse Alternatives

Following disposal, the City would be responsible for providing public services to the NFD Point Molate property.

##### *Alternative 1: Residential/Commercial*

##### **Significant and Mitigable Impacts (CEQA)/Less Than Significant Impacts (NEPA)**

The police and fire protection services impacts presented below are considered significant and mitigable under CEQA and less than significant under NEPA. Navy considers the proposed mitigation measures for the impacts under CEQA to be adopted standards that would be implemented as part of this alternative rather than as mitigation. Therefore, under NEPA, these potential impacts are less than significant, and no mitigation is required.

*Impact 1: Police Services.* Under CEQA, the current staffing levels of the Richmond Police Department (RPD) are insufficient to support this alternative. RPD staffing levels are based on location and population, which would increase to about 2,000 residents under this alternative. This is a significant and mitigable impact.

*Mitigation 1.* Increase staff by the equivalent of 4.2 new full-time police officers (City of Richmond 1998g). Implementing this measure would reduce this impact to a less than significant level.

*Impact 2: Fire Protection Services.* The RFD does not currently meet the service standards of six minutes to respond to a fire at NFD Point Molate or water pressure of 1,500 gpm (5,700 lpm) to fight fires. This is a significant and mitigable impact.

*Mitigation 2:* With additional development at NFD Point Molate, establish a fire station with a full crew (three firefighters) and fire truck at the existing fire station (Building 63). This will ensure a six-minute or shorter response time to fires and meet the service standard. In addition, install enough fire hydrants connected to the EBMUD water line along Western Drive to ensure at least 1,500 gpm (5,700 lpm) of water pressure on the site. Implementation of both these measures would meet service standards for fire protection and reduce this impact to a less than significant level.

##### **Less Than Significant Impact**

*Emergency Medical Response Services.* Development under this alternative is not expected to cause a need for a substantial increase in emergency medical response services. No mitigation is required.

67     ***Alternative 2: Industrial/Commercial***

68     The potential impacts and mitigations for Alternative 2 are the same as those identified  
69     for Alternative 1.

70     ***Alternative 3: Recreation/Commercial***

71     The potential impacts and mitigations for Alternative 3 are the same as those identified  
72     for Alternative 1.

73     **4.4.3 No Action Alternative**

74     Under the No Action Alternative, NFD Point Molate would remain a closed Federal  
75     property and would not be reused or redeveloped. No impacts on public services are  
76     anticipated, and no mitigation is required.

## 4.5 CULTURAL RESOURCES

The ROI for cultural resources is the area within the NFD Point Molate property boundary.

Factors considered in determining whether an alternative would have a significant impact on cultural resources include the extent or degree to which its implementation would result in a substantial and adverse change in the characteristics that qualify the cultural resource for listing on the NRHP, and for the purposes of CEQA, the California Register of Historical Resources, to the extent that the resource would no longer qualify for listing.

For purposes of this analysis, cultural resources are those properties listed in or eligible for inclusion in the NRHP. NRHP-listed or -eligible properties are also included in the California Register of Historical Resources, California Public Resources Code Section 5024.1(d)(1) (West Supp. 1999). The only listed property at NFD Point Molate is Winehaven (CA-CCO-422H), a historic district containing 29 detached residential cottages, two large winery buildings, a shipping building, and three support buildings (a power plant, fire house and warehouse). A historic archeological site, Chinese Shrimp Camp (CA-CCO-506H), has been determined eligible for listing on the NRHP for the information it is likely to contain about Chinese shrimp fishing camps and early Chinese communities in the Bay Area.

### *Planning Issues*

As discussed in Section 3.5 of this document, Section 106 of the National Historic Preservation Act (NHPA), 16 United States Code (U.S.C.) § 470f and its implementing regulations, 36 Code of Federal Regulation (C.F.R.) Part 800 (1999), requires Federal agencies to consider the effects of their undertakings on properties listed on or eligible for listing on the NRHP.

For properties listed before the date of enactment of the 1980 amendments to NHPA, as is true for Winehaven, the Keeper of the National Register no longer has the authority to amend the nominations to reduce the boundary or otherwise remove property from the NRHP, unless the property has been destroyed. All Federal undertakings that might affect properties within the Historic District would be subject to compliance with Section 106 of the NHPA.

Following the advice of the Keeper of the National Register, Navy intends to submit an amendment to the NRHP Nomination for Winehaven that would distinguish between the buildings and structures within the listed boundary that contribute or do not contribute to the Winehaven Historic District. Once the amendment is accepted by the



Keeper of the National Register, an undertaking not affecting a contributing building or structure could be addressed administratively as a “no effect” in accordance with Section 106 of the NHPA. Navy will also apply to the California Historical Resources Commission (Commission) to amend the Winehaven Historic District boundary as it appears on the California Register of Historical Resources to one that is more historically accurate. Commission acceptance of the appeal would limit the protection provided by state law to the property within the revised boundary.

#### *Proposed MOA for Disposal and Reuse*

Navy has initiated consultation with the State Historic Preservation Officer (SHPO), Advisory Council on Historic Preservation (ACHP), and City for the purpose of negotiating and entering into a Memorandum of Agreement (MOA) that would identify ways to avoid or mitigate adverse effects on cultural resources resulting from the disposal and reuse of surplus Federal property at NFD Point Molate.

The disposal and reuse alternative selected would be implemented according to the terms of the MOA, which would be signed by Navy and SHPO and filed with the ACHP. The City would be asked to sign as a concurring party. The MOA would deal with short-term impacts on NFD Point Molate cultural resources between the signing of the MOA and conveyance of the property, as well as long-term impacts associated with reuse of the property after conveyance. The MOA is expected to address the following:

- Resolution of the Winehaven Historic District boundary discrepancy. Navy will prepare and submit to the Keeper of the National Register an amendment that specifically distinguishes between the contributing and non-contributing properties to the Winehaven Historic District. Navy will also assist the City with an appeal to the State Historical Resources Commission to amend the boundary as it appears on the California Register of Historical Resources.
- Protection for archeological resources through pre-testing in advance of excavations in archeologically sensitive areas, monitoring construction where appropriate, and dissemination of information about sensitive areas to appropriate local officials.
- Collection and preservation of historic artifacts and records.
- Layaway and minimum levels of caretaker maintenance necessary to preserve the integrity of NRHP-listed or -eligible historic buildings pending reuse.
- Recording the Winehaven historic district for the Historic American Buildings Survey (already completed and accepted by the National Park Service).
- Requiring tenants to use the Secretary of the Interior’s *Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings* (U.S. Department of the Interior 1992) in maintaining and making improvements to buildings and structures in the Winehaven Historic District.

- Requiring that City staff recommend to the City Council that the contributing buildings and structures in the Winehaven Historic District be designated "Historical Structures," thereby affording them the protection of the Richmond Municipal Code (Ordinance No. 24-82 N.S.)

Navy anticipates that the MOA would establish a long-term, post-conveyance role for the City Planning Commission and the Superintendent of Inspection Services. They would review projects, including both new construction and rehabilitation, that affect the buildings and structures in the Winehaven Historic District, as is done today for the Point Richmond historic district and other designated "Historical Structures" within the City. If an MOA has not been executed and implemented at the time of disposal, Navy would ensure equivalent protections of the properties through deed restrictions.

#### 4.5.1 Navy Disposal Action Less Than Significant Impact

*Disposal of NRHP and Eligible Properties.* Disposal of NRHP-listed or -eligible properties without adequate provisions to protect the properties' historic integrity could adversely affect their continued listing or eligibility for the NRHP. The buildings and structures in the Winehaven Historic District, as well as the archaeology, would lose the protection of Federal preservation legislation. Prior to disposal, Navy and SHPO, with the concurrence of the City, would execute and implement an MOA containing adequate provisions to protect the properties' historic integrity. While the precise terms of the MOA have not been finalized, such provisions are anticipated to include, at a minimum, the measures listed previously under the "Planning Issues" discussion above. Navy would include the applicable provisions of the MOA as conditions of the conveyance. While the MOA would potentially allow for demolition of some historic buildings and modification of others, these changes would not be so great that the historic district would no longer qualify for inclusion in the NRHP. If an MOA has not been executed and implemented at the time of disposal, Navy would ensure equivalent protection of the properties by including preservation deed restrictions as conditions of conveyance.

#### 4.5.2 Community Reuse Alternatives *Alternative 1: Residential/Commercial* Less Than Significant Impacts

*Alteration of Historic Resources.* This alternative proposes the adaptive reuse of the historic Winehaven buildings and structures. Development could result in a substantial adverse change to one or more of the buildings and structures that contribute to the Winehaven NRHP Historic District. As set forth in the MOA, the historic structures would be covered by City Ordinance 24-82 N.S., which requires the use of the Secretary of the Interior's *Standards for Rehabilitation and Guidelines for Rehabilitating Historic*

110 *Buildings* (U.S. Department of the Interior 1992) for all alterations proposed to historic  
111 buildings and structures. Therefore, this potential impact would be less than  
112 significant. No mitigation is required.

113 *Incompatible New Construction Within or Adjacent to Historic District.* Proposed  
114 development could result in new construction adjacent to or within the Winehaven  
115 Historic District that is not compatible in design, scale, mass, or materials with buildings  
116 and structures that contribute to the Historic District. As set forth in the MOA, the  
117 historic structures would be covered by City Ordinance 24-82 N.S., which requires the  
118 use of the Secretary of the Interior's *Standards for Rehabilitation and Guidelines for*  
119 *Rehabilitating Historic Buildings* (U.S. Department of the Interior 1992) for all alterations  
120 proposed to historic buildings and structures. Therefore, this potential impact would be  
121 less than significant. No mitigation is required.

122 *Inadvertent Discovery of Archeological Resources.* Proposed development could result in  
123 the repair of building foundations; repair or replacement of infrastructure, such as roads  
124 and utilities; and other construction involving excavation. These activities could expose  
125 buried cultural resources and contribute to the loss of important historic or prehistoric  
126 archeological information about the Chinese Shrimp Camp or prehistoric occupation of  
127 the NFD Point Molate property. The provisions of the MOA or, in the absence of an  
128 MOA, deed restrictions, would include a requirement to inform future project  
129 developers of the potential for encountering archeological resources and require  
130 procedures to be followed to ensure that proper notification and protection are provided  
131 pursuant to state laws, should such resources be uncovered. Therefore, this potential  
132 impact would be less than significant. No mitigation is required.

#### 133 ***Alternative 2: Industrial/Commercial***

##### 134 ***Less Than Significant Impacts***

135 *Alteration of Historic Resources.* The potential impact of this alternative on historic resources  
136 would be the same as described for Alternative 1 above. No mitigation is required.

137 *Incompatible New Construction Within or Adjacent to the Historic District.* The potential  
138 impact of this alternative on historic resources would be the same as described for  
139 Alternative 1 above. No mitigation is required.

140 *Inadvertent Discovery of Archeological Resources.* The potential impact of this alternative  
141 on archeological resources would be the same as described for Alternative 1 above. No  
142 mitigation is required.

**Alternative 3: Recreation/Commercial**

**Less Than Significant Impacts**

*Alteration of Historic Resources.* The potential impact of this alternative on historic resources would be the same as described for Alternative 1 above. No mitigation is required.

*Incompatible New Construction Within or Adjacent to the Historic District.* The potential impact of this alternative on historic resources would be the same as described for Alternative 1 above. No mitigation is required.

*Inadvertent Discovery of Archeological Resources.* The potential impact of this alternative on archeological resources would be the same as described for Alternative 1 above. No mitigation is required.

**4.5.3 No Action Alternative**

Under the No Action Alternative, NFD Point Molate would remain a closed Federal property and would not be reused or redeveloped. The buildings and structures that contribute to the Winehaven Historic District have been secured and laid away to the extent practicable.

As long as the property remains under Navy control and jurisdiction, each action that affects the Winehaven Historic District or one of its contributing buildings will be reviewed under the requirements of Section 106 of the NHPA. Such reviews would conform to implementing regulations, 36 C.F.R. Part 800, that require consideration of alternatives to avoid adverse actions, in consultation with the SHPO, ACHP, and other interested parties. No impacts are anticipated, and no mitigation is required.

## 4.6 BIOLOGICAL RESOURCES

The ROI for biological resources is the NFD Point Molate property and areas of native habitat within 1 mile (1.6 km) of the property.

Factors considered in determining whether an alternative would have a significant impact on biological resources include the extent or degree to which its implementation would 1) affect sensitive habitats, such as wetlands, 2) change the distribution or reduce the population of non-pest feral/non-sensitive species of fish, wildlife, or plants, 3) adversely impact any species listed as endangered, threatened, or rare under Federal or state law, or 4) degrade or destroy habitat critical to the continued existence of any endangered, threatened, or rare species.

### *Impact Discussion*

Development of the NFD Point Molate property, as described in the Draft Reuse Plan, would be concentrated in areas that have been previously developed or disturbed and used for military administration and operations. In addition, each community reuse alternative contains open space.

### *Sensitive Habitats*

Sites A, B, C and D (Figure 3.6-1) comprise less than one acre of wetlands that are under the jurisdiction of the U.S. Army Corps of Engineers (U.S. ACE). Sites A, B and C are freshwater jurisdictional wetlands located near the center of the site, east of Western Drive in and near an area that is proposed for residential development under Alternative 1 and light industrial development under Alternative 2. The proposed development under Alternatives 1 and 2 could affect these wetlands depending on the final siting and design of the area. Site D is a saltwater jurisdictional wetland located offshore in the vicinity of the sewage treatment plant. Because Site D is offshore, and the shoreline area is planned to remain as a natural environment, reuse under any of the alternatives would not affect Site D.

Executive Order (E.O.) 11990, Protection of Wetlands, requires Navy to stipulate in the property conveyance documents that all jurisdictional wetlands on the property will be protected consistent with Federal and state laws (see Section 3.6.6). The U.S. ACE has asserted its jurisdiction over these wetlands (Site A through D) by its authority under Section 404 of the Clean Water Act (CWA). Section 404 recommends avoidance of jurisdictional wetlands through site planning and design. Where avoidance is not practicable, and if the cumulative acreage of the jurisdictional wetlands is less than one acre, a Nationwide Permit allowing alteration or fill can be issued. If the jurisdictional wetlands are not eligible for a Nationwide Permit and alteration and filling cannot be avoided, mitigation would be required.

The NFD Point Molate property also contains the coastal prairie natural plant community. The 225 acres (91 ha) of dry land open space provided in Alternatives 1 and 2 and 278 acres (112 ha) of dry land open space provided in Alternative 3 ensure that adequate amounts of this natural plant community would remain. In addition, new development is proposed only at sites where previous development or disturbance has already occurred, thereby minimizing the impact on existing native plant communities. Small losses of these communities located within or on the fringe of development areas would occur. However, large expanses of these same community types would persist in open space areas. The use of open space containing native plant communities would be restricted to trails and designated uses, such as picnic areas and viewing locations.

The eelgrass community, located on mudflats in the Bay, is also protected. The shallow mudflats are not conducive to active water recreation, such as swimming and boating, and the Draft Reuse Plan specifically states that protection of sensitive habitats must be implemented by restricting access and use. All of the alternatives propose 100 acres (40 ha) of submerged land open space. If dredging is required to maintain access to the pier, then protection of the eelgrass communities is provided through the Federal and state permitting process.

#### Special-Status Species

Special-status species include those listed as endangered, threatened, or rare, or as candidates for listing by the U.S. Fish and Wildlife Service, the California Department of Fish and Game (CDFG), and, for plants, the California Native Plant Society (CNPS). The only special-status species known to occur on NFD Point Molate property is the marsh gumplant (*Grindelia stricta* var. *angustifolia*), which is on CNPS List 4 (plants of limited distribution). At the NFD Point Molate property, marsh gumplant occurs in scattered populations along the immediate shoreline, which is designated in all the alternatives as a shoreline park and includes a trail that will utilize existing roads as much as possible. In addition, this species is found in the salt marsh community, a jurisdictional wetland that is protected by Federal and state regulations.

Intensified use of the shoreline by the public is expected. However, General Plan Policy OSC-B.2 requires developers to identify and implement mitigation measures (e.g., restricted access, leash laws for dogs, etc.) to avoid detrimental impacts on the biological productivity or aesthetic character of open water, marsh, mudflat, or tidelands. Consequently, plans and policies are in place that will protect the marsh gumplant from disturbance associated with community reuse of the property.

Marginal freshwater habitat for the red-legged frog (*Rana aurora draytonii*), a Federal threatened species, occurs on the site. No individuals, however, have been seen or collected on the NFD Point Molate property. The nearest documented observation of

the species is 11 miles (13 km) northeast of the site at Rodes Creek, near Hercules. The red-legged frog wetland habitat located on the site is protected by Federal, state, and local regulations, and it is not proposed for development under any of the reuse alternatives.

The proposed open space ensures that special-status animal species, that are not resident at the NFD Point Molate property, but could occasionally pass through the ROI, would sustain less than significant or no impacts as a result of project implementation. These species include, but are not limited to, the American peregrine falcon (*Falco peregrinus anatum*), California brown pelican (*Pelecanus occidentalis californicus*), California least tern (*Sterna antillarum brownii*), and winter-run chinook salmon (*Oncorhynchus tshawytsa*).

#### **Non-Pest Feral/Non-Sensitive Species**

All the community reuse alternatives contain open space and propose new development in areas that have previously been developed or disturbed. In addition, the alternatives utilize the native biological diversity of the site as a passive recreational/educational use. Any proposed development would comply with General Plan policies that protect and preserve native plant communities and wildlife habitats. In particular, OSC-A.2 and OSC-Q.1 require the preservation/conservation of unique plant communities and wildlife habitats. Consequently, the limited amount of developed area leaves 225-278 acres (91-112 ha) of open space, depending on the alternative, resulting in less than significant impacts on existing native plant and wildlife populations.

#### **Consistency with Plans and Policies**

*Endangered Species Act.* There are no known Federally listed species on the site.

*Clean Water Act.* Implementation of Alternatives 1 and 2 could affect wetland Sites A, B and C. However, these sites are under the regulatory jurisdiction of the U.S. ACE, and therefore implementation of Alternatives 1 and 2 would be in compliance with the CWA. Implementation of Alternative 3 would not affect wetland areas.

*E.O. 11990 and CDFG Code 1603.* The community reuse alternatives would be consistent with E.O. 11990 and CDFG Code 1603, because the conveyance documents transferring the NFD Point Molate property out of Federal ownership would reference uses that are restricted under Federal, state, and local wetland regulations.

*California Endangered Species Act.* There are no known state-listed species on the site.

*Vegetation Control for Fire.* The alternatives would be in conformance with state fire regulations (California State Assembly Bill 337) requiring appropriate fire breaks that

are maintained and watered. Local fire regulations implement this state statute. Fire response time, methods, and locations are described in Section 3.4, Public Services.

*City of Richmond General Plan.* Implementation of the community reuse alternatives would be consistent with the General Plan policies discussed in Section 3.6.6 because they would protect rare, threatened, and endangered species; native plant and wildlife habitats; sensitive habitats such as marshes, mudflats, or tidelands; and species of special interest.

#### 4.6.1 Navy Disposal Action

The disposal of NFD Point Molate out of Federal ownership would not result in any impacts on biological resources.

#### 4.6.2 Community Reuse Alternatives

##### *Alternative 1: Residential/Commercial*

##### **Less Than Significant Impacts**

*Degradation of Jurisdictional Wetlands (Factor 1).* Sites A, B and C could be affected by the residential development proposed under Alternative 1. Sites A, B and C are under the U.S. ACE jurisdiction by its authority under Section 404 of the CWA. Because regulations are in place to protect these wetlands, there would be no significant impact on wetlands associated with Alternative 1. No mitigation is required.

*Degradation of Sensitive Habitats (Factor 1).* Increased pedestrian activity associated with a shoreline park and recreational use of hillside open space would occur under this alternative. There could be increased boating around NFD Point Molate and the pier area. These activities could affect sensitive wetland, salt marsh, eelgrass and native plant communities. Project-specific conformance with General Plan policies discussed above would require developers to avoid these sensitive habitats. Most of the proposed development would occur on previously developed areas, avoiding existing eelgrass and native plant communities. Consequently, impacts on sensitive habitats associated with Alternative 1 are less than significant. No mitigation is required.

*Non-Pest Feral/Non-Sensitive Species (Factor 2).* No significant impacts on non-pest feral/non-sensitive species are expected because a substantial number of individuals are unlikely to be affected by proposed reuse activities. No mitigation is required.

*Endangered, Threatened, or Rare Species (Factor 3).* Alternative 1 would have a less than significant impact on marsh gumplant because it is in a jurisdictional wetland protected by Federal and state regulations. In addition, plans and policies are in place that will protect it from disturbance. No mitigation is required.



*Habitat for Endangered, Threatened, or Rare Species (Factor 4).* The red-legged frog wetland habitat located on the site would not be impacted because it is protected by Federal, state, and local regulations, and is not proposed for development. Potential impacts to non-resident species that may pass through the ROI, including American peregrine falcon and California pelican, would be less than significant because they would still be able to use the remaining open space that would be preserved. No mitigation is required.

**Alternative 2: Industrial/Commercial**

**Less Than Significant Impacts**

*Degradation of Jurisdictional Wetlands (Factor 1).* This impact is the same as described for Alternative 1. No mitigation is required.

*Degradation of Sensitive Habitats (Factor 1).* This impact is the same as described for Alternative 1. No mitigation is required.

*Non-Pest Feral/Non-Sensitive Species (Factor 2).* This impact is the same as described for Alternative 1. No mitigation is required.

*Endangered, Threatened, or Rare Species (Factor 3).* This impact is the same as described for Alternative 1. No mitigation is required.

*Habitat for Endangered, Threatened, or Rare Species (Factor 4).* This impact is the same as described for Alternative 1. No mitigation is required.

**Alternative 3: Recreation/Commercial**

**Less Than Significant Impacts**

*Degradation of Sensitive Habitats (Factor 1).* This impact is the same as described for Alternative 1. No mitigation is required.

*Non-Pest Feral/Non-Sensitive Species (Factor 2).* This impact is the same as described for Alternative 1. No mitigation is required.

*Endangered, Threatened, or Rare Species (Factor 3).* This impact is the same as described for Alternative 1. No mitigation is required.

*Habitat for Endangered, Threatened, or Rare Species (Factor 4).* This impact is the same as described for Alternative 1. No mitigation is required.

**4.6.3 No Action Alternative**

Under the No Action Alternative, NFD Point Molate would remain a closed Federal property and would not be reused or redeveloped. No impacts on biological resources are anticipated, and no mitigation is required.

## 4.7 WATER RESOURCES

The ROI for water resources is the NFD Point Molate property, immediately adjacent areas, underlying groundwater, and adjacent Bay waters that could affect or be affected by reuse activities.

Factors considered in determining whether an alternative would have a significant impact on water resources include the extent or degree to which its implementation would 1) degrade water quality; 2) adversely change groundwater flow; 3) increase exposure to flood hazards; or 4) conflict with standards established by regulatory agencies.

### *Impact Discussion*

#### **Surface Water Quality**

Construction activities associated with any of the community reuse alternatives could increase the potential for sedimentation into the Bay at the NFD Point Molate property. In addition, increased impervious surfaces and vehicular parking, as well as use of herbicides and fertilizers, could increase potential generation of contaminants in runoff from the property.

During construction, pollutants that could be transported via surface water would be controlled by implementing best management practices (BMPs) and controls as required by National Pollutant Discharge Elimination System (NPDES) permit and the City's Excavation, Grading, and Earthwork Construction Ordinance No. 19-97, as described in Section 3.7.4. New development, which would necessarily include a substantial upgrade to the existing storm water system, would trigger these requirements. Implementing these BMPs would prevent significant impacts on surface water and the Bay from silt, fertilizers, herbicides, and surface contaminants on roads and parking areas.

#### **Groundwater Flow and Quality**

The tallest building proposed under a community reuse alternative is three stories high, and it would not include deep foundations that would intersect the groundwater table. No large subsurface structures, such as an underground parking garage, that could impede or alter the flow of groundwater are planned. Light industrial or commercial uses could include aboveground storage tanks (ASTs) or underground storage tanks (USTs) containing petroleum products. Storage tank design and operation is regulated by the State of California and permitted by Contra Costa County. As required, the construction of a containment pad or vault beneath ASTs, double-walled construction with leak-protection systems for USTs, and annual testing requirements under county

36 permit for all tanks, would minimize the potential for leakage to underlying soils and  
37 groundwater.

#### 38 **Flood Hazards**

39 As described in Section 4.12, Utilities, all of the community reuse alternatives would  
40 include renovation and upgrading of the storm drainage system at the NFD Point  
41 Molate property. This would minimize the potential for flooding and ponding from  
42 storm water runoff on the property.

43 As described in Section 3.7, low-lying portions of the property would be subject to wave  
44 runoff at high tide to elevations of about 10 feet (3 m) above National Geodetic Vertical  
45 Datum (NGVD). Although final post-development elevations of the proposed reuse  
46 areas are not available, most of these areas are currently above this elevation and would  
47 continue to be so. Portions of the waterfront promenade, beaches, and other low-lying  
48 areas of the site could be below this elevation and, if so, would be subject to wave runoff  
49 when storms coincide with high tides. Sea level rise could increase this runoff.

#### 50 **Consistency with Plans and Policies**

51 Development associated with any of the reuse alternatives would be required to comply  
52 with all provisions of the CWA, as implemented by the Regional Water Quality Control  
53 Board (RWQCB). Developers would be required to prepare a Storm Water Pollution  
54 Prevention Plan (SWPPP) and obtain NPDES permits for discharges. Under the CWA, a  
55 SWPPP, including an erosion control plan, must be prepared for construction on sites  
56 cumulatively totaling 5 acres (2 ha) or more. Similar plans would be required for storm  
57 water runoff from any industrial facilities proposed for the property. In addition, the  
58 RWQCB requires waste discharge permits for all industrial process wastewater or  
59 treated sewage proposed for discharge. This permitting requirement would apply to a  
60 sewage treatment facility at the property, as well as to specific on-site industrial  
61 discharges, such as those from winery processes. Uses involving USTs would be  
62 required to obtain permits from the RWQCB, and the USTs would be designed to  
63 minimize potential leakage into soil or groundwater.

64 The reuse alternatives do not propose development in, or channelization of, creeks and  
65 would therefore comply with the City's Open Space and Conservation Element Policies  
66 OSC-1.1 and OSC-1.2. Soil erosion would be controlled by SWPPPs in compliance with  
67 Policy OSC-1.3. In addition, specific project proposals would be subject to further  
68 environmental review; groundwater quantity and quality would be protected through  
69 compliance with Policies OSC-K.1, OSC-K.2, and OSC-K.5. All new developments on  
70 the property would be required to hook up to sewage systems, although those systems  
71 could be new and not existing systems. This would be consistent with the intent of  
72 Policy OSC-L.1.

Interim and final erosion control plans would be required for specific developments, in compliance with the City's Excavation, Grading, and Earthwork Construction Ordinance Number (No.) 19-97. The City's Building Department would be responsible for enforcing this requirement.

#### **4.7.1 Navy Disposal Action**

The disposal of NFD Point Molate out of Federal ownership would not result in any impacts on water resources.

#### **4.7.2 Community Reuse Alternatives**

##### ***Alternative 1: Residential/Commercial***

##### **Less Than Significant Impacts**

*Increased Surface Water Contamination (Factor 1).* During construction activities, NPDES construction permitting requirements and conformance with the City's Excavation, Grading, and Earthwork Construction Ordinance No. 19-97 would minimize the transport of silt into surface waters. Contamination of surface waters by herbicides, fertilizers, and contaminants from roads and parking areas would be minimized by incorporating NPDES-required BMPs into the design of new or upgraded storm water systems. No mitigation is required.

*Changes in Groundwater Flow or Quality (Factors 1 and 2).* Alternative 1 would not involve uses known to have a substantial potential to contaminate groundwater. Building foundations and planned subsurface structures are not deep enough to substantially intersect and impede groundwater flow in the underlying aquifer. Light industrial and commercial uses could include USTs and ASTs; however, permit-mandated tank design and testing requirements minimize the potential for spills or leaks into soil and groundwater. No mitigation is required.

*Increased Exposure to Flood Hazards (Factor 3).* The potential increase in surface water runoff from additional impermeable surfaces (roads, parking lots, etc.) would be controlled by the expansion of the existing storm water system. All new habitable structures would be built at elevations above 10 feet (3 m) NGVD. No mitigation is required.

##### ***Alternative 2: Industrial/Commercial***

Alternative 2 involves a similar level of development to that under Alternative 1, although it would include substantially increased light industrial uses. Impacts would be similar to those described for Alternative 1. No mitigation is required.

106 ***Alternative 3: Recreation/Commercial***

107 Alternative 3 involves less development than under Alternative 1 or 2. Impacts would  
108 be similar to those described for Alternative 1. No mitigation is required.

109 **4.7.3 No Action Alternative**

110 Under the No Action Alternative, NFD Point Molate would remain a closed Federal  
111 property and would not be reused or redeveloped. No impacts on water resources are  
112 anticipated, and no mitigation is required.

## 4.8 GEOLOGY AND SOILS

The ROI for geology and soils is the NFD Point Molate property and underlying formations. The impact analysis discusses geological and seismic hazards, including landslides, erosion, ground shaking, settlement, liquefaction, and seismically induced flooding (tsunamis).

Factors considered in determining whether an alternative would have a significant impact on geology and soils include the extent or degree to which its implementation would 1) cause soil erosion, sedimentation, or land subsidence, 2) adversely affect unique geologic or topographic features, or 3) increase exposure of people, structures, or infrastructure to risk of catastrophic loss, injury, or death from rupture of a known earthquake fault, strong seismic ground shaking, or seismic-related ground failure, including liquefaction or landslides.

### *Impact Discussion*

#### **Landslides and Erosion**

New construction at the NFD Point Molate property would not occur along the steep hill slopes where landsliding or erosion is likely to occur. Erosion during grading operations or on cut-and-fill slopes would be prevented by following a grading plan, which is a City-required submittal prior to construction.

#### **Settlement and Liquefaction**

Areas that are prone to settlement and liquefaction, along with associated lateral spreading, include the fill, alluvium, and Bay Mud deposits shown on Figure 3.8-2. The City's permitting process, state law, and the Standard of Care require that geologic and soils investigations be conducted where new construction is planned (note that new construction is not proposed along the shoreline, where sediments are most likely to be prone to liquefaction). Data collected during soil investigations and subsequent laboratory testing would include depth of fill, bedrock, and groundwater; soil classification; soil density; and soil expansion properties. Foundations would be designed accordingly and submitted to the City's building department for approval.

#### **Unique Geologic Features**

No unique geologic or topographic features would be significantly affected under any of the alternatives. New construction would occur in the flat and relatively level portions of the site in areas that have been previously developed.

#### **Geologic and Seismic Hazards**

Development of the NFD Point Molate property under any of the reuse alternatives would intensify the use of the area and place persons in new or existing structures.

Risks to structures or their occupants from geologic and seismic hazards are present because of the site's proximity to active faults and the presence of unconsolidated fill and Bay Mud sediments. These risks are of greatest concern under Alternative 1, because it calls for the construction of new residential buildings in addition to the reuse of older historic structures (which would occur under Alternatives 2 and 3 as well), such as the Winehaven buildings, which were built before adequate seismic safety codes were established.

The potential effects of geologic and seismic hazards in California are well known, and a number of standard practices are employed during construction to minimize property damage and prevent injury or the loss of life during the lifetime of a building. Implementation of these standards is assured in new buildings through the City's permitting process, which requires submittal of grading plans, building plans, and technical reports by state-certified professionals (certified engineering geologists, soils engineers, structural engineers, etc.). Data provided in these reports are used by engineers and architects to design foundations and buildings that resist damage or failure from expansive soils, differential settlement of unconsolidated soils, liquefaction, ground lurching, seismic shaking, and other geologic or seismic hazards. Most potential geologic hazards are therefore mitigated during the normal building process. One exception could be impacts associated with older structures that have not been seismically reinforced.

#### **Ground Shaking**

Older historic buildings, such as the Winehaven buildings, were built to the seismic safety standards of their day. However, these standards do not meet modern building codes that include seismic engineering. These older historic buildings could become seriously damaged during a strong earthquake, potentially injuring occupants. Seismic retrofitting is required by neither the City nor the state. The City has a voluntary seismic retrofitting program; however, retrofitting of the buildings at the NFD Point Molate property would not be assured under normal development procedures. Seismic retrofitting of the historic buildings would be required to significantly reduce the potential of injury to occupants.

#### **Tsunamis**

As discussed in Section 3.8, the potential for significant runups due to seismically induced waves (tsunamis) is expected to be small. Theoretical runups at the NFD Point Molate property are approximately 3.5 feet (1 m). These runups could be added to high tide elevations of about 10 feet (3 m) above NGVD. Although final post-development elevations of the proposed reuse areas are not available, most of these areas are currently above elevations likely to be affected by runups. Portions of the waterfront promenade, beaches, and other low-lying areas of the site could be below this elevation.



#### Consistency with Plans and Policies

Adherence to the City's building permitting process would achieve consistency with plans and policies regarding protection of soils and water resources during grading and safety of occupants in new buildings during a major earthquake. Following the process would achieve compliance with the City's Excavation, Grading and Earthwork Construction Ordinance, the Safety Element of the General Plan, the state Alquist-Priolo Earthquake Fault Zoning Act, and California Division of Mines and Geology (CDMG) guidelines for evaluating seismic hazards.

Occupancy of the older historic buildings without appropriate seismic upgrading, however, could be inconsistent with the Safety Element of the General Plan, which calls for the protection of the community from unreasonable risks associated with the effects of seismically induced surface rupture, ground shaking, and ground failure.

#### 4.8.1 Navy Disposal Action

The disposal of NFD Point Molate out of Federal ownership would not result in any impacts on geology and soils.

#### 4.8.2 Community Reuse Alternatives

##### *Alternative 1: Residential/Commercial*

##### **Significant and Mitigable Impact**

*Impact: Severe Seismic Ground Shaking (Factor 3).* New construction would meet current seismic standards contained in the Uniform Building Code, the CDMG guidelines for evaluating seismic hazards, and the Safety Element of the General Plan. State law only requires seismic retrofitting of older unsafe buildings if they are to be used for municipal buildings. Therefore, older historic structures could be damaged in a large earthquake and pose a risk to people and structures. In addition, infrastructure components (utilities and roadways) could be damaged or destroyed.

*Mitigation:* Before reusing existing structures, perform the following:

- Analyze and, if necessary, perform seismic upgrades of structures designated for reuse when rehabilitation occurs to minimize life safety risks from failures in large earthquakes. Do not reuse structures that cannot feasibly be retrofitted to meet a life safety objective.
- Inspect and retrofit to existing standards those utilities that are essential for maintaining emergency services or that could increase hazards (such as fire). Replace utilities that cannot be retrofitted or supplement them with backup systems.

Implementing these measures would reduce this impact to a less than significant level.

**Less Than Significant Impact**

*Increased Soil Erosion, Sedimentation, or Land Subsidence (Factor 1).* New construction would not occur along the steep hill slopes where landsliding or erosion is likely to occur. Substantial erosion during grading operations or on cut-and-fill slopes would be prevented by following a grading plan. The City's permitting process, state law, and Standard of Care require that geologic and soils investigations be conducted where new construction is planned. Thus, foundations would be designed to minimize the potential for land subsidence. No mitigation is required.

**Alternative 2: Industrial/Commercial****Significant and Mitigable Impact**

*Impact: Severe Seismic Ground Shaking (Factor 3).* The impact under Alternative 2 is the same as under Alternative 1.

*Mitigation:* Mitigation measures are the same as for Alternative 1.

**Less Than Significant Impact**

*Increased Soil Erosion, Sedimentation, or Land Subsidence (Factor 1).* These potential impacts would be the same as described for Alternative 1. No mitigation is required.

**Alternative 3: Recreation/Commercial****Significant and Mitigable Impact**

*Impact: Severe Seismic Ground Shaking (Factor 3).* The impact under Alternative 3 is the same as under Alternative 1.

*Mitigation:* Mitigation measures are the same as for Alternative 1.

**Less Than Significant Impact**

*Increased Soil Erosion, Sedimentation, or Land Subsidence (Factor 1).* These potential impacts would be the same as described for Alternatives 1 and 2. No mitigation is required.

**4.8.3 No Action Alternative**

Under the No Action Alternative, NFD Point Molate would remain a closed Federal property and would not be reused or redeveloped. No impacts on geology and soils resources or from seismic hazards are anticipated, and no mitigation is required.

## 4.9 TRANSPORTATION, TRAFFIC, AND CIRCULATION

The ROI for transportation, traffic, and circulation includes the San Pablo Peninsula, south to I-580, and east to Canal Boulevard.

Factors considered in determining whether an alternative would have a significant impact on transportation, traffic, and circulation include the extent or degree to which its implementation would 1) expose people to unsafe road conditions; 2) cause the Level of Service (LOS) to deteriorate to LOS E or F or increase congestion at intersections currently operating at or anticipated to operate at LOS F; 3) increase demand on public transportation (transit) in excess of planned or anticipated capacity at time of increase; 4) increase demand for bicycle and pedestrian facilities in excess of planned or anticipated capacity at time of increase; 5) increase traffic along freeway segments and ramps; or 6) increase truck traffic.

### *Impact Discussion*

Traffic impacts are assessed by calculating the number of trips generated (trip generation) for each of the community reuse alternatives based on the land uses proposed. Trips generated for the alternatives are distributed over the affected roadway network. Traffic impacts are calculated based on the additional trips applied to the affected intersections, freeway ramps, and freeway segments. The change is described in terms of LOS based on the criteria presented in Section 3.9.2. Traffic impacts were assessed for the years 2010 and 2020. The Metropolitan Transportation Commission (MTC) and ABAG use these benchmark years to plan for regional transportation improvements based on regional land use/demographic projections and travel demand forecasts. The year 2010 is at about the midway point between existing conditions and expected build-out in 2020.

### *Trip Generation*

The trip generation rates are based on the Institute of Transportation Engineers (ITE) Trip Generation Manual, 5th Edition, and a floor area ratio (FAR) of 0.50, which is the maximum permitted by the City (ITE 1998). Typically, developments of the type described in the Draft Reuse Plan build out with a FAR in the range of 0.30 to 0.35. If, as each phase of the project is developed, a lower-than-maximum FAR is produced, it can be anticipated that the significant and mitigable traffic impacts projected by the analysis will be less severe. Tables 4.9-1 through 4.9-3 summarize trip generation rates for the community reuse alternatives.

Alternative 1 is estimated to generate 10,886 daily trips, of which 6,170 would be generated by residential land uses (single-family, multifamily, and live/work) and 4,716 by non-residential uses (Table 4.9-1). Alternative 1 would generate 836 vehicle trips (424

inbound and 412 outbound) during the A.M. peak hour and 1,108 vehicle trips (550 inbound and 558 outbound) during the P.M. peak hour.

TABLE 4.9-1

## TRIP GENERATION ESTIMATES FOR ALTERNATIVE 1—RESIDENTIAL/COMMERCIAL

Land Uses	Daily Vehicle Trips	Average Daily Trips	A.M. Peak Hour Trips			P.M. Peak Hour Trips		
			Inbound	Outbound	Total	Inbound	Outbound	Total
Commercial	3,626	3,180	234	32	266	123	247	370
Industrial/Commercial	654	905	76	12	88	12	81	93
Residential	6,170	5,570	112	368	480	410	224	634
Open Space/Recreation	436	65	2	0	2	5	6	11
Total	10,886	9,720	424	412	836	550	558	1,108

Source: U.S. Navy 1998d.

Alternative 2 would generate about 17 percent more daily trips than Alternative 1, and traffic would be highly directional during the A.M. and P.M. peak hours. It is estimated that Alternative 2 would generate 12,702 daily trips, of which 1,408 vehicle trips (1,238 inbound and 170 outbound) would be generated during the A.M. peak hour and 1,596 vehicles (274 inbound and 1,322 outbound) during the P.M. peak hour (Table 4.9-2).

TABLE 4.9-2

## TRIP GENERATION ESTIMATES FOR ALTERNATIVE 2—INDUSTRIAL/COMMERCIAL

Land Uses	Daily Vehicle Trips	Average Daily Trips	A.M. Peak Hour Trips			P.M. Peak Hour Trips		
			Inbound	Outbound	Total	Inbound	Outbound	Total
Commercial	3,626	3,180	234	32	266	123	247	370
Industrial/Commercial	8,626	11,770	1,002	138	1,140	146	1,068	1,214
Open Space/Recreation	450	70	2	0	2	5	7	12
Total	12,702	15,020	1,238	170	1,408	274	1,322	1,596

Source: U.S. Navy 1998d.

Alternative 3 is estimated to generate approximately 50 to 60 percent fewer daily trips than the other two community reuse alternatives. Alternative 3 would generate 5,480 trips, of which 437 (384 inbound and 53 outbound) would be generated during the A.M. peak hour and 569 vehicle trips (151 inbound and 418 outbound) during the P.M. peak hour (Table 4.9-3).

55

TABLE 4.9-3

56 **TRIP GENERATION ESTIMATES FOR ALTERNATIVE 3—RECREATION/COMMERCIAL**

Land Uses	Daily Vehicle Trips	Average Daily Trip	A.M. Peak Hour Trips			P.M. Peak Hour Trips		
			Inbound	Outbound	Total	Inbound	Outbound	Total
Commercial	3,454	2,935	211	29	240	119	228	347
Industrial/Commercial	1,464	2,010	171	24	195	26	181	207
Open Space/Recreation	562	85	2	0	2	6	9	15
<b>Total</b>	<b>5,480</b>	<b>5,030</b>	<b>384</b>	<b>53</b>	<b>437</b>	<b>151</b>	<b>418</b>	<b>569</b>

57 Source: U.S. Navy 1998d.

58 **Trip Distribution**

59 Trip distribution percentages were derived from the CCTA Travel Demand Model and  
60 are shown for all community reuse alternatives in Figure 4.9-1. For all the alternatives,  
61 94 percent of trips were assigned to the East Bay. Of these trips, 37 percent were to the  
62 Richmond Parkway, 19 percent to Canal Boulevard, and 38 percent to I-580 east of  
63 Canal Boulevard. The remaining six percent of all trips were assigned to Marin  
64 County/North Bay on I-580 west of Western Drive.

65 **Traffic Volumes**

66 The reuse alternatives would affect traffic volumes on the existing roadway network  
67 (Appendix E, Figure E.4-1). Traffic volumes generated by the alternatives are illustrated  
68 in Appendix E, Figures E.4-2 through E.4-4. Traffic volumes for the No Action  
69 Alternative (no reuse of NFD Point Molate and for each of the community reuse  
70 alternatives in 2010 and 2020 (expected year of full build-out) are illustrated in  
71 Appendix E, Figures E.4-5 through E.4-12.

72 The California Department of Transportation (Caltrans) considers 1,500 vehicles per  
73 hour as a screening threshold for further study of ramp operations. However, this  
74 screening threshold is not considered an impact criterion because it only requires  
75 further study.

76 **Intersections, Freeway Ramps, and Freeway Segments**

77 All three community reuse alternatives would increase trip generation and reduce levels  
78 of service compared with the No Action Alternative in 2020. Alternative 1 would  
79 degrade LOS at the westbound I-580/Richmond Parkway intersection from LOS C to E  
80 in the A.M. peak hour (Table 4.9-4). With mitigation, LOS would be improved to B. All  
81 freeway ramps would operate at acceptable levels of LOS C or better under  
82 Alternative 1, although the Richmond Parkway westbound on-ramp would exceed the  
83 Caltrans threshold of 1,500 vehicles per hour in the A.M. peak hour (Table 4.9-5).  
84 Freeway segments would operate at acceptable levels under Alternative 1 (Table 4.9-6).

# TOTAL TRIP DISTRIBUTION (DAILY VEHICLE TRIPS) FOR THE REUSE ALTERNATIVES

Direction of Travel	Alternative 1 Residential/ Commercial	Alternative 2 Industrial/ Commercial	Alternative 3 Recreation/ Commercial
<b>East</b>			
To Richmond Parkway	4,028	4,700	2,028
To Canal Boulevard	2,068	2,413	1,041
To I-580 Oakland/Hayward	4,137	4,827	2,082
<b>West</b>			
To I-580 Marin County	653	762	329

Source: Korve Engineering 1998a

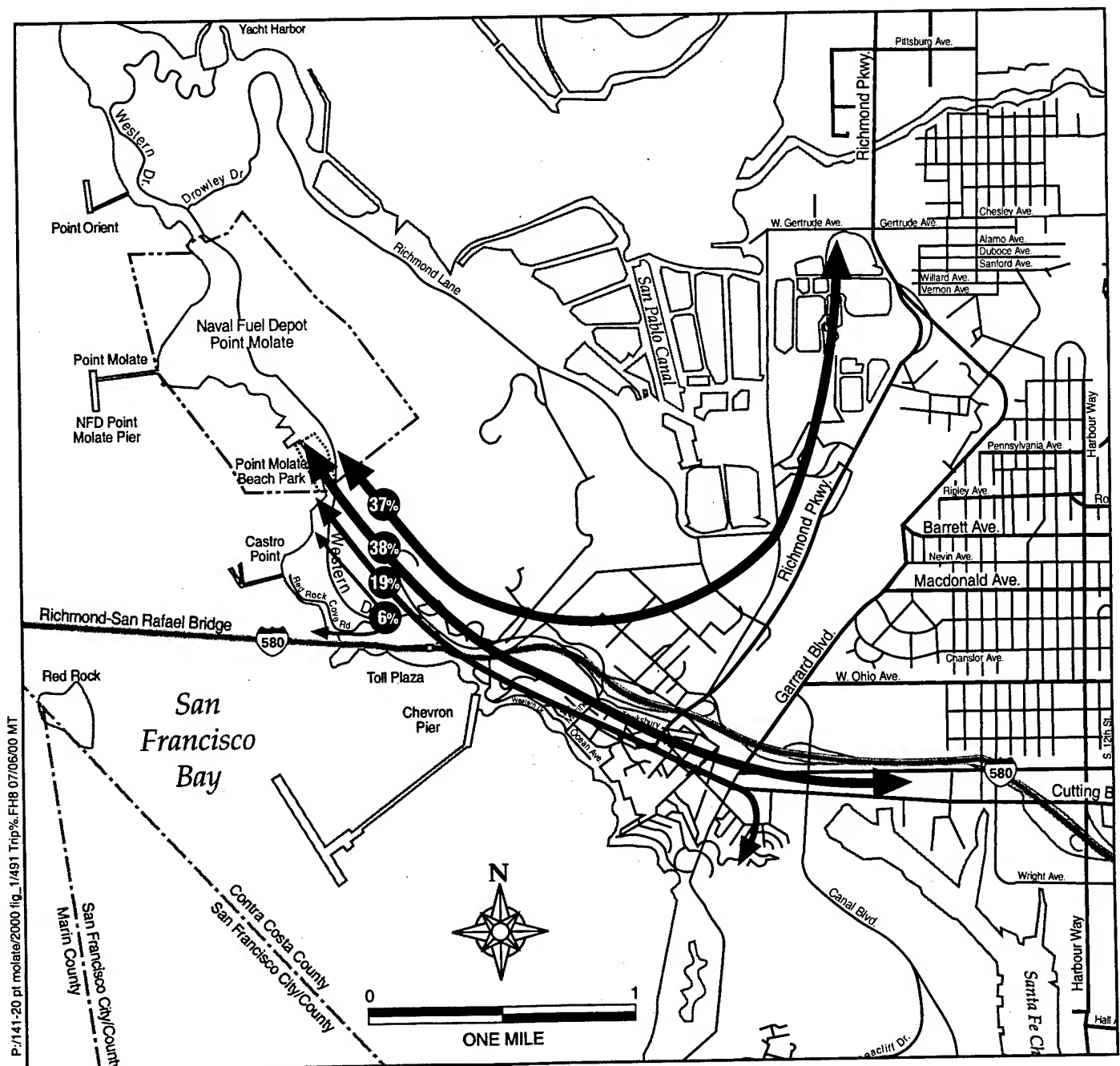


Figure 4.9-1: Trip Distribution for NFD Point Molate

**TABLE 4.9-4**  
**LEVEL OF SERVICE AT INTERSECTIONS AT FULL BUILD-OUT**

SIGNALIZED INTERSECTIONS	NO ACTION ALTERNATIVE 2020				ALTERNATIVE 1 RESIDENTIAL/COMMERCIAL				ALTERNATIVE 2 INDUSTRIAL/COMMERCIAL				ALTERNATIVE 3 RECREATION/COMMERCIAL			
	A.M. PEAK		P.M. PEAK		A.M. PEAK		P.M. PEAK		A.M. PEAK		P.M. PEAK		A.M. PEAK		P.M. PEAK	
	V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS
I-580 WB/Canal Boulevard	0.27	A	0.27	A	0.29	A	0.29	A	0.32	A	0.28	A	0.28	A	0.28	A
I-580 EB/Canal Boulevard	0.23	A	0.29	A	0.23	A	0.32	A	0.23	A	0.37	A	0.23	A	0.31	A
I-580 WB/Richmond Parkway	0.80	C	0.66	B	0.94/ 0.64*	B	0.85/ 0.70*	D/B*	1.10/ 0.71*	F/C*	0.87/ 0.75*	D/C*	0.89	D	0.74	C
I-580 EB/Richmond Parkway	0.30	A	0.68	B	0.40	A	0.82	D	0.38/ 0.25*	A/A*	0.97/ 0.57*	E/A*	0.32	A	0.78	C
I-580 EB/Marine Street	0.27	A	0.66	B	0.37	A	0.79	C	0.35	A	0.94	E	0.30	A	0.75	C

Source: U.S. Navy 1998d. \*With mitigation. v/c = volume to capacity. LOS = level of service. WB = westbound. EB = eastbound.

**TABLE 4.9-5**  
**LEVEL OF SERVICE ON FREEWAY RAMPS AT FULL BUILD-OUT**

FREEWAY RAMPS	NO ACTION ALTERNATIVE 2020				ALTERNATIVE 1 RESIDENTIAL/COMMERCIAL				ALTERNATIVE 2 INDUSTRIAL/COMMERCIAL				ALTERNATIVE 3 RECREATION/COMMERCIAL			
	A.M. PEAK		P.M. PEAK		A.M. PEAK		P.M. PEAK		A.M. PEAK		P.M. PEAK		A.M. PEAK		P.M. PEAK	
	VPH	LOS	VPH	LOS	VPH	LOS	VPH	LOS	VPH	LOS	VPH	LOS	VPH	LOS	VPH	LOS
Western Drive	44	C	26	C	430	C	551	D	204	C	1,269	D	94	C	420	C
	26	B	16	B	49	B	50	B	36	B	95	B	29	B	41	B
	101	B	38	B	525	C	588	B	1,339	C	312	B	485	C	189	B
Richmond Parkway	406	B	332	B	407	B	336	B	407	B	332	B	407	B	332	B
	517	B	1,027	B	696	B	1,271	C	655	B	1,533	C	561	B	1,191	C
	1,382	C	794	B	1,646	C	1,136	B	2,149	D	964	B	1,620	C	888	B
	472	B	436	B	472	B	436	B	472	B	436	B	472	B	436	B
Canal Boulevard	412	B	500	B	412	B	500	B	412	B	500	B	412	B	500	B
	279	B	217	B	357	B	323	B	311	B	468	B	289	B	297	B
	318	B	253	B	318	B	253	B	318	B	253	B	318	B	253	B

Source: U.S. Navy 1998d. VPH = vehicles per hour. LOS = level of service. WB = westbound. EB = eastbound. Westbound on-ramp volumes at Richmond Parkway include both Richmond Parkway and Canal Boulevard on-ramps. The eastbound off-ramp at Richmond Parkway includes both Marine Street and Richmond Parkway off-ramps.

TABLE 4.9-6  
LEVEL OF SERVICE ON FREEWAY SEGMENTS AT FULL BUILD-OUT

FREEWAY MAINLINE SEGMENT	NO ACTION ALTERNATIVE 2020				ALTERNATIVE 1 RESIDENTIAL/ COMMERCIAL				ALTERNATIVE 2 INDUSTRIAL/ COMMERCIAL				ALTERNATIVE 3 RECREATION/ COMMERCIAL			
	A.M. PEAK		P.M. PEAK		A.M. PEAK		P.M. PEAK		A.M. PEAK		P.M. PEAK		A.M. PEAK		P.M. PEAK	
	Volume (pcphpl)	LOS	Volume (pcphpl)	LOS	Volume (pcphpl)	LOS	Volume (pcphpl)	LOS	Volume (pcphpl)	LOS	Volume (pcphpl)	LOS	Volume (pcphpl)	LOS	Volume (pcphpl)	LOS
West of Western Drive	1,607	D	1,805	D	1,622	D	1,824	D	1,650	D	1,815	D	1,621	D	1,810	D
	1,264	C	1,077	C	1,274	C	1,090	C	1,268	C	1,107	C	1,265	C	1,086	C
Between Western Drive and Marine Street	1,088	C	1,214	C	1,245	C	1,426	C	1,177	C	1,694	D	1,116	C	1,367	C
	1,293	C	1,085	C	1,455	C	1,295	C	1,765	D	1,190	C	1,440	C	1,143	C
Between Marine Street and Richmond Parkway	1,046	C	948	B	1,135	C	1,070	C	1,083	C	1,236	C	1,057	C	1,039	B
	1,293	C	1,085	C	1,455	C	1,295	C	1,765	D	1,190	C	1,440	C	1,143	C
Between Richmond Parkway and Canal Boulevard	1,046	C	948	B	1,135	C	1,070	C	1,083	C	1,236	C	1,057	C	1,039	B
	767	B	782	B	828	B	862	B	946	B	822	B	822	B	804	B
East of Canal Boulevard	1,097	C	1,056	C	1,156	C	1,137	C	1,121	C	1,248	C	1,104	C	1,117	C
	1,068	C	1,045	C	1,128	C	1,124	C	1,247	C	1,084	C	1,123	C	1,067	C

Source: U.S. Navy 1998d. pcphpl = passenger cars per hour per lane. LOS = level of service. WB = westbound. EB = eastbound.



Alternative 2 would have the greatest traffic impact of the reuse alternatives. By 2010, Alternative 2 would reduce LOS at the westbound I-580/Richmond Parkway intersection from LOS C to F in the A.M. peak hour. The eastbound I-580/Richmond Parkway intersection would deteriorate from LOS B to E in the P.M. peak hour. With mitigation, these intersections would operate at acceptable levels.

By 2020, the eastbound I-580/Marine Street intersection would degrade from LOS B to E in the P.M. peak hour. The significance of this impact depends on the timing of build-out of the project and the ultimate density of development. This intersection would operate at an acceptable LOS D if the project were built out by 2010; however, if build-out occurs in 2020, the additional regional growth would lead to a significant adverse impact. Because of the characteristics of the terrain and the geometry of the off-ramp, physical (widening) mitigation would not be feasible.

The Caltrans threshold of 1,500 vehicles per hour would be exceeded on the Richmond Parkway westbound on-ramp in 2010 during the A.M. peak hour and the Richmond Parkway eastbound off-ramp in 2020 during the P.M. peak hour. However, all ramps would operate at acceptable levels of LOS D or better. Freeway segments would operate at acceptable levels (Table 4.9-6).

Alternative 3 would have the least traffic impact of the community reuse alternatives. Intersections and freeway segments would operate at acceptable levels. The Caltrans threshold of 1,500 vehicles per hour would be exceeded on the Richmond Parkway westbound on-ramp by 2010 and in 2020 during the A.M. peak hour, but all freeway ramps would operate at acceptable levels of LOS C or better.

#### **Road Conditions**

Sections of Western Drive north of I-580 and on the NFD Point Molate property narrow to a width of about 20 feet (6 m). The road would not be adequate to serve the projected traffic volumes generated by the community reuse alternatives because it does not meet City road standards. Access to Western Drive from eastbound I-580 is also inadequate for the traffic volumes generated by the reuse alternatives. Access to Western Drive is circuitous, requiring exiting at Richmond Parkway, crossing under the freeway, reentering I-580 westbound, and exiting at Western Drive.

Reuse of the NFD Point Molate property would be influenced by the absence of the eastbound off-ramp. Land uses that might be appropriate, because of no eastbound off-ramp, would be those that are not highly time-dependent; restaurants with a high regional reputation; industry serving a wide market area; other uses that would not be affected by the circuitous access from Marin County. Residential, recreational, and other uses specifically focused on East Bay destinations would also not be restricted by

the existing ramp configuration at Western Drive. Uses that would likely be inappropriate at the NFD Point Molate property are retail uses requiring high visibility and easy on-off access.

#### **Public Transit**

The NFD Point Molate property is relatively isolated from other potential transit markets, so that considerable non-revenue-producing mileage would be necessary to provide service to it. The proposed residential land use under Alternative 1 is estimated to generate approximately 7,000 person-trips per day. If public transit use at the NFD Point Molate property were typical of the whole City, it is estimated that 800 of these trips could be made on transit. Usage could be less depending on the profiles of future residents.

Under Alternatives 2 and 3, transit service is unlikely. The East Bay is heavily automobile-oriented. The non-residential developments proposed under Alternatives 2 and 3 would not generate enough transit patrons to support service. However, there might be a possibility of weekend local service similar to that provided by the Alameda-Contra Costa Transit District (AC Transit) for some East Bay parks.

As discussed in Section 3.9.4, there are two bus routes that could be extended into the NFD Point Molate property depending on the potential for patronage and demand for service. Local service could be provided through an extension of AC Transit Route 73, currently terminating at Tewksbury Street and the Richmond Parkway. Route 73 would provide direct connections to the Richmond Bay Area Rapid Transit (BART) station and destinations along the San Pablo Avenue corridor. Direct service to San Francisco could be provided by the AC Transit LD Route, although the trip to San Francisco would take approximately 55 minutes. An extension of Route 73 would be the most likely means of implementing service if patronage or demand supported it.

There would be no connections to either AMTRAK or BART beyond that provided by the possible AC Transit Route 73 extension.

#### **Ferry Service**

A water taxi could provide water-borne service for the commercial recreation uses proposed at the NFD Point Molate property. This concept could require construction of a boarding float adjacent to or independent of the existing dock. The existing pier is not suitable for such activities, as it is designed for larger ships with a much greater distance between the water and boarding deck (freeboard) of the vessel. Access to the dock could be integrated into the pedestrian circulation system.

**Rail**

None of the alternatives warrant special connections to either AMTRAK or BART beyond that which would be provided by a possible extension of Route 73, discussed above.

**Bicycle and Pedestrian Circulation**

All community reuse alternatives would maintain and improve bicycle and pedestrian circulation systems through the development of sidewalks, a pedestrian promenade, hiking trails, and Bay Trail elements.

The relatively flat grades of the western portions of the property would accommodate Class I, II or III bicycle facilities. However, the selection of the exact location of such routes goes beyond the conceptual nature of planning for reuse at this point. Under Alternatives 2 and 3, there would be a lower demand for both pedestrian and bicycle facilities than under Alternative 1.

The bicycle routes described above could also serve pedestrians. Within the project site, the ultimate design of the project would include provisions for pedestrians (i.e., sidewalks) at key locations, primarily along Western Drive, and connecting major activity centers.

**Truck Traffic Associated with Goods Movement**

Alternatives 1 and 3 would most likely not add substantial amounts of truck traffic associated with goods movement on Western Drive, whereas Alternative 2 could, because of the amount of light industrial uses proposed. Under all the community reuse alternatives, Western Drive would have adequate capacity to accommodate increases in goods movement after the road has been brought up to City standards. Likewise, there would be sufficient capacity on the various freeway ramps and on the Richmond Parkway to accommodate the anticipated increases in truck traffic under the community reuse alternatives.

**Truck Traffic Associated with Construction Impacts**

During project construction, Draft Reuse Plan alternatives would generate impacts in two areas: construction related to building and roadway projects within the project site, and construction related to the required improvement of Western Drive between I-580 and the project site. The impacts related to on-site construction will vary depending on the size of specific development projects and their timing. Truck activity can be anticipated as earthwork and grading occur in the construction process. Heavy equipment may need to be moved into and from the site as construction occurs. The level of trucking activity would be insignificant with respect to the capacity of both Western Drive, I-580, and the other major travel facilities in the ROI. For the type of

development being considered, it is likely that hourly truck volumes of less than 10 and daily truck volumes of less than 100 would be expected as the absolute maximum. The roadway system would not be negatively impacted by this level of activity.

Construction impacts of Western Drive would have two types of impacts: 1) an increase in truck traffic and the moving of heavy equipment and 2) periodic interruptions in service on Western Drive during construction. The level of construction traffic would be well within the capacity of the highway system. A traffic control plan would identify the minimum number of lanes that would be required to remain in operation during construction activities, as well as the required configuration during non-construction hours. The plan could also identify specific hours that construction activity would be allowed. However, the volumes on Western Drive would operate at acceptable levels during construction, and peak hour limitations would not be required.

#### Consistency with Plans and Policies

*Regional Plans.* Implementation of the community reuse alternatives would be consistent with the West Contra Costa Transportation Advisory Committee's Action Plan Traffic Service Objectives for I-580. The projected LOS on I-580 would be consistent with Action Plan objectives. The reuse alternatives' impacts on vehicle occupancy objectives are assumed to be minor.

*Association of Bay Area Governments.* All reuse alternatives would include bicycle paths and trails consistent with the ABAG Bay Trail Plan.

*City of Richmond General Plan, Circulation Element.* All of the community reuse alternatives would be consistent with City policies and guidelines to promote access to recreational and shoreline areas through the development of recreational opportunities and public access (Policies CIR-A.5 and CIR-B.3, Guideline No. 5).

The alternatives would not be consistent with Policy CIR-C.7 and shoreline Guidelines No. 1 and 2 to promote the inclusion of mass transit facilities in the project, as no such facilities are proposed in the Draft Reuse Plan. However, those facilities could be required at the approval phase for specific projects.

Alternatives 1 and 3 would be consistent with the City's policies promoting the maintenance of LOS standards in compliance with Measure C and the WCCTAC's Action Plan (Policies CIR-D.3, CIR-D.4). Alternative 2 would be consistent, after implementation of the mitigation measure recommended in this document.

#### 4.9.1 Navy Disposal Action

The disposal of NFD Point Molate out of Federal ownership would not result in any impacts on transportation, traffic, or circulation.

## 4.9.2 Community Reuse Alternatives

### *Alternative 1: Residential/Commercial*

#### **Significant and Mitigable Impacts**

*Impact 1: Unsafe Circulation (Factor 1).* The substandard condition of sections of Western Drive and the lack of access to Western Drive from eastbound I-580 would result in inadequate conditions to safely support the increased traffic volumes under Alternative 1. While planned reuse of NFD Point Molate would result in improvements to Western Drive on site, as described in the assumptions in Chapter 2, the off-site road segment of Western Drive (between I-580 and the south entrance) do not conform to City standards. Therefore, Alternative 1 would result in a significant impact on circulation.

*Mitigation 1.* Widen Western Drive between I-580 and the entrance to the NFD Point Molate property to conform to applicable City standards. Design Western Drive to be a two-lane roadway, with turn lanes, that accommodates bicyclists and pedestrians. Provide signs, appropriate striping, and roadway markings at I-580 and Western Drive to direct eastbound travelers on I-580 to Western Drive. Implementing this mitigation measure would reduce this impact to a less than significant level.

There could be secondary impacts on the environment associated with widening Western Drive. Such impacts could include geology and soil impacts associated with the structural engineering of the road. Sensitive plant and animal species could be affected by loss or disturbance to habitat. If the road is realigned, there could be land use impacts on adjacent property. Visual impacts could result from the introduction of cut and fill slopes or other visual contrasts created by road widening and possible realignment. Assessing the environmental consequences of widening Western Drive would be speculative at this time because no plans are in place. However, environmental analysis in compliance with CEQA would be conducted when the road widening project is defined.

*Impact 2: Deterioration in LOS at the Westbound I-580/Richmond Parkway Intersection (Factors 2 and 5).* At build-out in 2020, Alternative 1 would degrade LOS at the westbound I-580/Richmond Parkway intersection to LOS E in the A.M. peak hour.

*Mitigation 2.* Re-stripe the southbound approach at the intersection of the I-580 westbound ramp and Richmond Parkway to one right-turn lane, one through lane, one shared through left-turn lane, and one left-turn lane (currently the configuration is one right-turn lane, two through lanes, and one left-turn lane). Approve and assure implementation of the re-striping of this intersection in consultation with Caltrans. This mitigation measure would improve the LOS to B, reducing this impact to a less than significant level.

278 *Impact 3: Traffic Volumes on Richmond Parkway Ramps (Factor 5).* Freeway ramps with  
279 volumes of less than 1,500 vehicles per hour are considered by Caltrans to operate  
280 acceptably; ramps with volumes greater than 1,500 vehicles per hour require further  
281 analysis. The threshold would be exceeded on the Richmond Parkway westbound  
282 on-ramp in the A.M. peak hour.

283 *Mitigation 3.* Monitor the Richmond Parkway westbound on-ramp by conducting a  
284 traffic study for each phase of the project. Evaluate the impact of the development  
285 proposed by project phase and the most recent projections of traffic for the freeway  
286 ramp. If the threshold of 1,500 vehicles per hour is exceeded, conduct an operational  
287 analysis satisfying Caltrans requirements. If the operational analysis indicates an  
288 unacceptable operating condition, develop modifications to the ramp with the goal of  
289 reducing the vehicles per hour to less than 1,500.

#### 290 **Less Than Significant Impacts**

291 *Deterioration in LOS at Other Intersections (Factors 2 and 5).* Alternative 1 would not  
292 significantly degrade the LOS at the other intersections analyzed in this document  
293 (I-580 westbound/Canal Boulevard, I-580 eastbound/Canal Boulevard, I-580  
294 eastbound/Richmond Parkway and I-580 eastbound/Marine Street). At build-out,  
295 these intersections would operate at LOS D or better in the A.M. and P.M. peak hours.  
296 No mitigation is required.

297 *Increased Demand on Public Transportation (Factor 3).* Two AC Transit bus routes could be  
298 extended into the project site depending on the potential for patronage and demand for  
299 service. Local service could be provided through an extension of AC Transit Route 73  
300 with connections to BART and San Pablo Avenue. Service to San Francisco could be  
301 provided by the AC Transit LD Route. A water taxi could provide water-borne service,  
302 which would require construction of a boarding float. No mitigation is required.

303 *Increased Demand for Bicycle and Pedestrian Facilities (Factor 4).* Alternative 1 would  
304 maintain and improve bicycle and pedestrian circulation systems through the  
305 development of sidewalks, a pedestrian promenade, hiking trails, and Bay Trail  
306 elements. No mitigation is required.

307 *Deterioration in LOS on Other Freeway Ramps and Freeway Segments (Factor 5).*  
308 Alternative 1 would not significantly degrade the LOS on freeway segments. At build-  
309 out, freeway segments would operate at LOS D or better in the A.M. and P.M. peak  
310 hours. The ramp volumes analyzed in this document would not exceed the threshold of  
311 1,500 vehicles per hour on the ramps other than the Richmond Parkway westbound on-  
312 ramp. No mitigation is required.

*Increased Truck Traffic (Factor 6).* During project operation, Alternative 1 would not add substantial amounts of truck traffic associated with goods movement on Western Drive. Western Drive would have adequate capacity for trucks after the road has been brought up to City standards. During construction, truck traffic would be well within the capacity of the highway and local roadway system. No mitigation is required.

#### ***Alternative 2: Industrial/Commercial***

#### **Significant and Mitigable Impacts**

*Impact 1: Unsafe Circulation (Factor 1).* This impact is the same as that identified for Alternative 1.

*Mitigation 1.* Mitigation is the same as that identified for Alternative 1.

*Impact 2: Deterioration in LOS at the Westbound I-580/Richmond Parkway Intersection (Factors 2 and 5).* By 2010, the westbound I-580/Richmond Parkway intersection is projected to deteriorate to LOS F during the A.M. peak hour. This is a conservative projection of the impact on this intersection for two reasons: (1) it is a non-standard signalized intersection that is only partially controlled, and (2) trip generation was based on land uses assuming the maximum FAR permitted by the City of 0.50 (see the Traffic Assumptions in Chapter 2). If the actual FAR of development is closer to 0.30 (which is typical for the City), the LOS would likely remain acceptable.

*Mitigation 2.* Mitigation is the same as that identified for Alternative 1. Implementing this mitigation measure would improve LOS during the A.M. and P.M. peak hours to LOS B in 2010, reducing this impact to a less than significant level. In 2020, this intersection would operate at LOS C with mitigation.

*Impact 3: Traffic Volumes on Richmond Parkway Ramps (Factor 5).* The Caltrans threshold of 1,500 vehicles per hour would be exceeded on the Richmond Parkway westbound on-ramp by 2010 during the A.M. peak hour and the Richmond Parkway eastbound off-ramp in 2020 during the P.M. peak hour.

*Mitigation 3.* Mitigation is the same as that identified for Alternative 1, Mitigation 3.

*Impact 4: Deterioration in LOS on the Eastbound I-580/Richmond Parkway Intersection (Factors 2 and 5).* LOS at the eastbound I-580/Richmond Parkway intersection would deteriorate to LOS E in the P.M. peak hour.

*Mitigation 4.* Remove the channelization island separating traffic turning right from westbound Tewksbury Avenue onto northbound Richmond Parkway. Replace the free northbound through lane with a signal-controlled northbound lane. Modify the signal to control the northbound right-turn lane. Re-stripe the intersection to one right-turn

lane and two left-turn lanes (currently the configuration is one right-turn lane and one left-turn lane). With mitigation, the intersection would operate at LOS A during the P.M. peak hour.

*Impact 5: Deterioration in LOS at the Eastbound I-580/Marine Street Intersection (Factors 2 and 5).* At full build-out in 2020, Alternative 2 is expected to adversely affect the I-580 eastbound ramp/Marine Street intersection, reducing the LOS from B to E in the P.M. peak hour. The significance of this impact depends on the timing of build-out of the project, as well as the ultimate density of development. This intersection would operate at an acceptable LOS D with the project in 2010; however, by 2020, the additional increment of regional growth would lead to a significant adverse impact. Because of the characteristics of the terrain and the geometry of the off-ramp, physical (widening) mitigation for this impact would not be feasible.

The analysis performed for this EIS/EIR is based on a Floor-Area-Ratio (FAR) of 0.50, which is the maximum permitted by the City. Typically, developments of the type envisaged build out with a FAR in the range of 0.30 to 0.35. If, as the community reuse plan is developed, a lower-than-maximum FAR is produced, it is unlikely that the significant negative impact projected by this analysis would occur.

*Mitigation 5.* Prior to approval of a project phase, require the project proponent to evaluate the impact of the additional development on this intersection. If a significant adverse impact is identified, require a reduced FAR so that the intersection operates at LOS D or better. Implementing this measure would reduce this potential impact to a less than significant level.

#### **Less Than Significant Impacts**

*Deterioration in LOS at Other Intersections (Factors 2 and 5).* Alternative 2 would not significantly degrade the LOS at other intersections analyzed in this document (I-580 westbound/Canal Boulevard and I-580 eastbound/Canal Boulevard. At build-out, these intersections would operate at LOS A in the A.M. and P.M. peak hours. No mitigation is required.

*Increased Demand on Public Transportation (Factor 3).* Under Alternative 2, AC Transit bus service to the NFD Point Molate property is not likely because it would not generate enough transit patrons to support service to the NFD Point Molate property. However, there could be weekend local service similar to that provided by AC Transit for some East Bay parks. The increase in demand for a water taxi under Alternative 2 would be less than under Alternative 1 and would not generate enough potential patrons. No mitigation is required.



*Increased Demand for Bicycle and Pedestrian Facilities (Factor 4).* Alternative 2 would have a lower demand for both pedestrian and bicycle facilities than Alternative 1. Improvements in sidewalks and bicycle paths under all reuse alternatives (Section 2.4.1) would ensure that this potential impact would be less than significant. No mitigation is required.

*Deterioration in LOS on Freeway Ramps and Freeway Segments (Factor 5).* Alternative 2 would not significantly degrade the LOS on freeway ramps and freeway segments. At build-out, freeway ramps and segments would operate at LOS D or better in the A.M. and P.M. peak hours. The ramp volumes analyzed in this document would not exceed the threshold of 1,500 vehicles per hour on the ramps other than the Richmond Parkway westbound on-ramp and Richmond Parkway eastbound off-ramp. No mitigation is required.

*Increased Truck Traffic (Factor 6).* During project operation, Alternative 2 could add a substantial amount of truck traffic associated with goods movement on Western Drive. However, Western Drive would have adequate capacity to accommodate increases in goods movement after the road has been brought up to City standards. As described for Alternative 1, truck traffic during project construction would have less than significant impacts. No mitigation is required.

#### ***Alternative 3: Recreation/Commercial***

##### **Significant and Mitigable Impact**

*Impact 1: Unsafe Circulation (Factor 1).* This impact is the same as that identified for Alternative 1.

*Mitigation 1.* Mitigation is the same as that identified for Alternative 1.

*Impact 2: Traffic Volumes on Richmond Parkway Ramp (Factor 5).* The Caltrans threshold of 1,500 vehicles per hour would be exceeded on the Richmond Parkway westbound on-ramp during the A.M. peak hour in 2020.

*Mitigation 2.* Mitigation is the same as that identified for Alternative 1, Mitigation 3.

##### **Less Than Significant Impact**

*Deterioration in LOS on the I-580 Westbound Ramp/Richmond Parkway Intersection (Factors 2 and 5).* Alternative 3 would not significantly degrade the LOS at the I-580 Westbound Ramp/Richmond Parkway intersection. At build-out, this intersection would operate at LOS D in the A.M. peak hour and LOS C in the P.M. peak hour. No mitigation is required.

*Deterioration in LOS on Intersections (Factors 2 and 5).* Alternative 3 would not significantly degrade the LOS at the five intersections analyzed in this document (I-580 westbound/Canal Boulevard, I-580 eastbound/Canal Boulevard, I-580 eastbound/Richmond Parkway, and I-580 eastbound/Marine Street). At build-out, four of these intersections would operate at LOS A in the A.M. peak hour and LOS C or better in the P.M. peak hour. The I-580 westbound/Richmond Parkway intersection would operate at LOS D in the A.M. peak hour and LOS C in the P.M. peak hour. No mitigation is required.

*Increased Demand on Public Transportation (Factor 3).* This potential impact under Alternative 3 is the same as under Alternative 2. No mitigation is required.

*Increased Demand for Bicycle and Pedestrian Facilities (Factor 4).* Improvements in sidewalks and bicycle paths under all reuse alternatives (Section 2.4.1) would ensure that this potential impact would be less than significant. No mitigation is required.

*Deterioration in LOS on Freeway Ramps and Freeway Segments (Factor 5).* Alternative 3 would not significantly degrade LOS on freeway ramps and freeway segments. At build-out, freeway ramps would operate at LOS C or better in the A.M. and P.M. peak hours. Freeway segments would operate at LOS D or better in the A.M. and P.M. peak hours. No mitigation is required.

*Increased Truck Traffic (Factor 6).* Alternative 3 would not add substantial amounts of truck traffic associated with goods movement on Western Drive. As described for Alternative 1, truck traffic during project construction would have less than significant impacts. No mitigation is required.

#### **4.9.3 No Action Alternative**

Under the No Action Alternative, NFD Point Molate would remain a closed Federal property and would not be reused or redeveloped. No impacts on transportation, traffic, or circulation are anticipated, and no mitigation is required.

## 4.10 AIR QUALITY

The ROI for air quality is the San Francisco Bay Area Air Basin. Primary air pollutants and airborne asbestos fibers are evaluated at the NFD Point Molate property. Odors are assessed within a 2-mile (3-km) radius of the property, and secondary air pollutants are assessed basin-wide.

Factors considered in determining whether an alternative would have a significant impact on air quality include the extent or degree to which its implementation would 1) cause violations of Federal or state ambient air quality standards at locations that do not currently experience such violations; 2) increase the magnitude or frequency of existing or anticipated future violations of Federal or state ambient air quality standards; 3) increase the exposure of the general public to concentrations of hazardous air pollutants that represent a significant health risk; 4) expose sensitive receptors (e.g., children, the elderly, or persons with respiratory illnesses) to objectionable odors; or 5) conflict with or obstruct implementation of applicable air quality attainment plans.

### *Impact Discussion*

Impacts on ambient air quality are evaluated with respect to traffic-related air contaminants, industrial emissions of toxic air contaminants and objectionable odors, and construction-related impacts on air quality. The following discussion focuses on the criteria pollutants for which the San Francisco Bay Area Air Basin is either in nonattainment or has only recently achieved attainment. Impacts on the generation of nitrogen dioxide and sulfur dioxide are not discussed below, because the San Francisco Bay Area Air Basin is in attainment for these pollutants and the project would not affect their attainment status.

### **Traffic-Related Emissions of Ozone Precursors, PM<sub>10</sub>, and Carbon Monoxide**

Potential vehicle traffic associated with development of the NFD Point Molate property would generate ozone precursors (reactive organic compounds [ROG] and nitrogen oxides [NO<sub>x</sub>]), inhalable particulate matter (PM<sub>10</sub>), and carbon monoxide. Alternative 2 would generate the highest vehicle traffic of the three community reuse alternatives. Emissions of traffic-related ozone precursors and PM<sub>10</sub> from Alternative 2 are predicted to be less than 0.05 percent of the baseline emission rates for the Bay Area Basin (Table 4.10-1). None of the proposed reuse alternatives would cause or substantially contribute to a change in Federal or state air quality attainment designations for ozone or PM<sub>10</sub>. In addition, none of the reuse alternatives would result in traffic-related exceedances of Federal or state standards for carbon monoxide (see Appendix E).

The Bay Area '97 Clean Air Plan (CAP) (BAAQMD 1997b) assumes that the population of the Bay Area will increase 27 percent by the year 2020. Housing proposed for the

NFD Point Molate property under Alternative 1 would add about 2,000 residents to the site, which represents about 2 percent of Richmond's 1999 population of 93,800 people. The increase in population associated with development at the NFD Point Molate property is small relative to the 27 percent increase in population predicted for the Bay Area between 1998 and 2020. Alternatives 2 and 3 would not directly affect population growth in the City, since no housing would be added. Therefore, none of the proposed reuse alternatives would foster growth in excess of the levels assumed by the CAP.

**TABLE 4.10-1**  
**COMPARISON OF AVERAGE DAILY VEHICLE MILES TRAVELED**  
**AND ESTIMATED EMISSION RATES<sup>1</sup>**

	Average Daily Vehicle Miles Traveled (thousands)	ROG Emission Rate <sup>1</sup> (lbs/day)	NO <sub>x</sub> Emission Rate <sup>1</sup> (lbs/day)	PM <sub>10</sub> Emission Rate <sup>1</sup> (lbs/day)
<i>Baseline Values for the Bay Area Basin<sup>2</sup></i>	142,050	718,000	902,000	456,000
Alternative 1 (Residential/Commercial)	86	72	102	150
Alternative 2 (Industrial/Commercial)	100	75	118	176
Alternative 3 (Recreation/Commercial)	44	33	52	77

Source: BAAQMD 1997b.

**Notes:**

lbs = pounds  
NO<sub>x</sub> = Nitrogen oxides  
PM<sub>10</sub> = Inhalable particulate matter  
ROG = Reactive organic compounds

<sup>1</sup> Emissions were estimated using the URBEMIS5 program (See Appendix E.5). Values in table are rounded to the nearest pound. As specified in BAAQMD guidance, ROG and NO<sub>x</sub> values are calculated for summer conditions (BAAQMD 1996). PM<sub>10</sub> values are not affected by the season in URBEMIS5 modeling. These estimates were made on the basis of weekday emissions. (See Appendix E for assumptions used in generating estimated emissions.)

<sup>2</sup> Average daily vehicle miles traveled in 2020 were obtained by multiplying the 1990 total miles for regional travel in the Bay Area (MTC 1998) by the predicted average annual growth rate of 1.4 percent (BAAQMD 1997b). Baseline values for ROG, NO<sub>x</sub>, and PM<sub>10</sub> are from the Bay Area '97 CAP. These values are for 2010, which is the closest year to 2020 for which predicted values are available.

Average daily vehicle miles traveled for the alternatives were obtained by multiplying the number of trips per day generated by the URBEMIS5 program by the average trip length of 7.8 miles for Alameda and Contra Costa counties (See Appendix E.5).

One of the goals of the CAP is to achieve a growth rate of daily vehicle miles traveled that is lower than the population growth rate. The CAP predicts that, while population in the Bay Area Air Basin will grow at an annual rate of 1.1 percent, daily vehicle miles traveled will grow at an annual rate of 1.4 percent. Thus, the CAP's predicted growth rate in vehicle miles traveled does not meet its goal relative to population growth. Vehicle miles traveled associated with the community reuse alternatives amount to less than 0.1 percent of the estimated regional vehicle miles traveled for 2020 (Table 4.10-1). Therefore, the community reuse alternatives would not significantly impact CAP's projected greater than-desired rate of growth of vehicle miles traveled in the Bay Area Air Basin.

#### **Airborne Asbestos Fibers from Construction and Demolition**

Construction activities under any of the reuse alternatives could require the demolition or renovation of buildings, which could release airborne asbestos fibers. Compliance with BAAQMD Regulation 11, Rule 2, would limit impacts from asbestos fibers.

#### **Airborne Dust from Construction and Demolition**

Airborne dust could be generated by construction and demolition under any of the reuse alternatives. Releases of airborne dust would be minimized by compliance with the City's Grading Ordinance (Ordinance 19-97) and BAAQMD Regulation 6-305. The City's Grading Ordinance requires preparation of a Final and Interim Erosion and Sediment Control Plan, which specifies dust control methods. BAAQMD Regulation 6-305 requires that there be no visible emissions of particulate material at construction sites and specifies dust control measures (such as wetting of soil and work restrictions on windy days).

#### **Industrial Emissions of Toxic and Nuisance Contaminants**

*On-Site Industrial Emissions of Toxic Air Contaminants.* Under each of the community reuse alternatives, toxic air contaminants could be generated from stationary sources, such as boilers, emergency generators, and other industrial and commercial sources. These sources would be regulated by BAAQMD through its permitting process.

*Off-Site Industrial Emissions.* Potential impacts associated with off-site industrial activities are discussed in terms of land use incompatibilities in Section 4.1.

*Objectionable Odors Associated with On-Site Activity.* Objectionable odors could result from commercial operations, light industrial operations, and wastewater treatment on the property. Project-specific analysis of objectionable odor sources would address potential conflicts between residential and odor-producing activities on site.

As described in Section 4.12, options for wastewater treatment are to (1) construct a new wastewater plant and replace/upgrade the collection system, (2) treat wastewater on site and haul the excess to the Richmond Municipal Sewer District plant for treatment, and (3) construct a new pipeline and pumping system to transfer wastewater to the City's sewage treatment plant. Potential objectionable odor impacts on project residents, employees, and visitors would result from Options 1 or 2 if a new treatment plant and collection system were not carefully sited and appropriate odor control measures not implemented. If Option 3 is selected, no objectionable odors would be expected.

For each of the reuse alternatives, objectionable odors associated with on-site commercial or light industrial activities could be mitigated through compliance with BAAQMD Rule 2, New Source Review, and BAAQMD Regulation 7, Odorous Substances. Rule 2 provides for the review of new and modified sources of stationary air emissions and provides mechanisms and emission offsets, by which authority may be granted to construct such sources. Regulation 7 places general limitations on objectionable odorous substances and specific emission limitations on objectionable odorous compounds. Objectionable odors associated with wastewater treatment have the most potential for impacts under Alternative 1 because of the level of use proposed. Objectionable odors associated with wastewater treatment could be mitigated through the design and siting of the wastewater treatment facility. Depending on the actual design of the treatment facility, objectionable odor impacts could place siting constraints on components of Alternative 1. Under Alternatives 2 and 3, objectionable odor impacts on employees and visitors could be mitigated to a less than significant level.

*Objectionable Odors Associated with Off-Site Industrial Activity.* Projects with the potential to frequently expose the public to objectionable odors are deemed to have a significant impact, with odor impacts on residential areas and other sensitive receptors warranting the closest scrutiny (BAAQMD 1999b). Objectionable odors generated by the adjacent refinery or other industrial uses east of the property could impact occupants of NFD Point Molate.

According to BAAQMD CEQA Guidelines (BAAQMD 1999b), development could cause an impact if it resulted in the placement of sensitive receptors in the range of influence (2 miles [3.2 km] for a refinery; 1 mile [1.6 km] for a chemical plant) of an existing objectionable odor source, even if the development itself does not generate objectionable odors. A project near a source of objectionable odors is identified as having a significant odor impact if the odor source has had more than one confirmed complaint per year or three unconfirmed complaints per year. Odor complaints related to the Chevron refinery (34 confirmed and 251 unconfirmed complaints from January 1993 through July 1999) exceed the BAAQMD significance criterion (BAAQMD 1998b).

The residential component of Alternative 1 would be located within a 2-mile (3-km) radius of the Chevron refinery; this distance is identified by the BAAQMD as the threshold for further evaluation. The nearest residential component boundary would be approximately 0.23 miles (0.37 km) from the closest refinery tanks and approximately 0.80 miles (1.3 km) from refinery operations. Objectionable odors that could affect the property are more likely to emanate from the refinery rather than the tanks. Therefore, development of the residential components of Alternative 1 could subject sensitive receptors to a significant objectionable odor impact. However, the potential for objectionable odors from these sources to reach the developed portions of the NFD Point Molate property is reduced to less than significant levels by the following factors: open lands on the east side of the NFD Point Molate property; the property's location generally upwind of the refinery and other industrial uses; and the interceding Potrero Ridge, which provides a barrier between the property and facilities east of the ridge. Objectionable odor impacts would be less for Alternatives 2 and 3, because these alternatives do not include residential uses of the site.

#### **Consistency with Plans and Policies**

*Federal Clean Air Act and California Clean Air Act.* The Federal and state clean air acts establish ambient air quality standards for criteria pollutants (see Section 3.10). As discussed above, emissions associated with development of the NFD Point Molate property under any of the reuse alternatives would not change the Federal or state attainment area designations for criteria air pollutants.

*BAAQMD Clean Air Plan.* The BAAQMD CAP (BAAQMD 1997b) identifies various land use measures and trip control measures that can minimize the regional air quality impacts of development projects. The reuse alternatives neither include nor preclude the implementation of trip control measures. Project-specific proposals could incorporate land use measures and trip control measures to the extent feasible, as defined in the CAP. Alternative 1, which includes a mixture of residential development with commercial and light industrial development, presents the greatest opportunity for the successful implementation of land use measures and trip control measures. Consistency with the BAAQMD CAP would be evaluated at the project-specific level.

*City of Richmond General Plan.* Goal OSC-P of the General Plan requires property owners and the City to work with the BAAQMD to ensure that new developments are in compliance with BAAQMD rules and regulations. Conformance with the General Plan would be assessed in the context of project-level reviews. Conformance with BAAQMD plans and policies and hazardous materials laws and regulations would ensure that specific proposals would not conflict with the General Plan.

*Richmond Hazardous Materials Ordinance.* Activities associated with reuse of NFD Point Molate may require the use and management of hazardous materials and result in the generation of hazardous wastes. These hazardous substances could affect air quality through the release of volatile constituents or particulate matter. Property owners would be required to comply with the City's Hazardous Materials Ordinance regarding the use of hazardous materials and the generation of hazardous waste. Conformance with the Hazardous Materials Ordinance would be assessed at the project-specific level. Conformance with hazardous materials laws and regulations would reduce the amount of emissions from hazardous materials and waste and ensure that future project-specific proposals would not conflict with the Richmond Hazardous Materials Ordinance.

#### 4.10.1 Navy Disposal Action

The disposal of NFD Point Molate out of Federal ownership would not result in any impacts on air quality. Transfers of ownership, interests, and titles to real or personal property are exempt from Clean Air Act conformity determination requirements [40 C.F.R. 93.153(c)(2)(xiv) and (xix); 40 C.F.R. 93.153(c)(2)(xx)]. The Navy's Record of Non-Applicability is included in Appendix E.

#### 4.10.2 Community Reuse Alternatives

##### *Alternative 1: Residential/Commercial*

##### **Significant and Mitigable Impacts**

*Impact 1: Objectionable Odors Associated with On-Site Activity (Factor 4).* Objectionable odors could result from commercial operations, light industrial operations, and wastewater treatment on the property. These odors could affect residents, occupants of commercial and industrial facilities, and visitors to the property.

*Mitigation 1.* Prior to the issuance of any permit, evaluate objectionable odors from light industrial uses on a project-specific basis and implement appropriate odor controls and/or buffers. For uses involving potential objectionable odor sources, such as a winery, incorporate adequate odor controls into the project design or provide adequate buffer zones between residential and industrial developments. Objectionable odors from wastewater are a function of the treatment options described above in the impact discussion. If on-site treatment is selected, design and site the plant to ensure that residents are not subject to objectionable odors from the plant or select off-site wastewater treatment. Implementing either of these measures would reduce this impact to a less than significant level.

*Impact 2: Consistency with BAAQMD CAP (Factor 5).* Alternative 1 would be inconsistent with the BAAQMD CAP because CAP trip control measures were not considered in the Draft Reuse Plan.



Mitigation 2. Prior to the approval of any discretionary project, integrate CAP trip control measures into specific project development proposals.

### Less Than Significant Impacts

*Traffic-Related Emissions of Ozone Precursors (ROG and NO<sub>x</sub>), PM<sub>10</sub>, and Carbon Monoxide (Factors 1 and 2).* Potential vehicle traffic and population growth associated with Alternative 1 are consistent with CAP assumptions for the area. The estimated increases in ROG, NO<sub>x</sub>, and PM<sub>10</sub> emissions represent less than 0.05 percent of the estimated baseline emissions in the Bay Area Air Basin (see Table 4.10-1). Local carbon monoxide concentrations were estimated for three high-use intersections, using the CALINE 4 dispersion model. The estimated concentrations (see Appendix E) do not exceed Federal or state carbon monoxide standards. Consequently, Alternative 1 is not expected to cause a change in Federal or state air quality attainment designations. No mitigation is required.

*Airborne Asbestos Fibers from Demolition and Airborne Dust from Construction and Demolition (Factor 3).* Project construction could require the demolition or renovation of buildings, which could release airborne asbestos fibers, posing a health threat. However, this would be reduced to a less than significant level by compliance with BAAQMD regulations that implement asbestos regulations established under the National Emission Standards for Hazardous Air Pollutants. Airborne dust from construction and demolition would be a less than significant impact because the developers would be required to comply with the City's Grading Ordinance (Ordinance 19-97) and BAAQMD Regulation 6-305. No mitigation is required.

*On-Site Industrial Emissions of Toxic Air Contaminants (Factor 3).* Toxic air contaminants could be generated under Alternative 1 from stationary sources, such as boilers, emergency generators, and other industrial and commercial sources. BAAQMD regulations establish emission control requirements for new stationary sources and could require emission offsets to minimize net increases in emissions. Sources of air pollutant emissions from this alternative would be required to comply with all BAAQMD regulations. Therefore, they are not considered to have a significant air quality impact. No mitigation is required.

*Objectionable Odors Associated with Off-Site Industrial Activity (Factor 4).* The residential component of this alternative would be located within the 2-mile (3-km) range of influence for objectionable odors from the Chevron refinery (BAAQMD 1999b). However, this potential impact would be less than significant due to the intermittent nature of the objectionable odor events, prevailing wind patterns, and the project's open space buffer between the Chevron refinery and the proposed residential units. No mitigation is required.

**Alternative 2: Industrial/Commercial**

**Significant and Mitigable Impacts**

*Impact 1: Objectionable Odors Associated with On-Site Activity (Factor 4).* This impact is similar to that identified under Alternative 1 for occupants of commercial and industrial facilities and visitors. It differs from the impact identified under Alternative 1 in that more odors could result from the light industrial operations. There could be a reduction in exposure under Alternative 2 because residential uses are not proposed.

*Mitigation 1.* Mitigation is the same as described for Alternative 1.

*Impact 2: Consistency with BAAQMD CAP (Factor 5).* This impact is the same as described for Alternative 1.

*Mitigation 2.* Mitigation is the same as described for Alternative 1.

**Less Than Significant Impacts**

*Traffic-Related Emissions of Ozone Precursors (ROG and NO<sub>x</sub>), PM<sub>10</sub>, and Carbon Monoxide (Factors 1 and 2).* Potential vehicle traffic and population growth associated with Alternative 2 are consistent with CAP assumptions for the area. The estimated increases in ROG, NO<sub>x</sub>, and PM<sub>10</sub> emissions represent less than 0.05 percent of the estimated baseline emission rate in the Bay Area Air Basin (see Table 4.10-1). Potential traffic-related impacts on carbon monoxide levels are similar to those described for Alternative 1 (see Appendix E). Consequently, Alternative 2 is not expected to cause a change in Federal or state air quality attainment designations. No mitigation is required.

*Airborne Asbestos Fibers from Demolition and Airborne Dust from Construction and Demolition (Factor 3).* As described for Alternative 1, this would be a less than significant impact. No mitigation is required.

*On-Site Industrial Emissions of Toxic Air Contaminants (Factor 3).* As described for Alternative 1, this would be a less than significant impact. No mitigation is required.

*Objectionable Odors Associated with Off-Site Industrial Activity (Factor 4).* As described for Alternative 1, this would be a less than significant impact. In addition, the lack of sensitive receptors under this alternative further reduces potential impacts. No mitigation is required.

**Alternative 3: Recreation/Commercial**

**Significant and Mitigable Impact**

*Impact: Consistency with BAAQMD CAP (Factor 5).* This impact is the same as described for Impact 2 under Alternative 1.

*Mitigation.* Mitigation is the same as described for Impact 2 under Alternative 1.

#### **Less than Significant Impacts**

*Traffic-Related Emissions of Ozone Precursors (ROG and NO<sub>x</sub>), PM<sub>10</sub>, and Carbon Monoxide (Factors 1 and 2).* Potential vehicle traffic and population growth associated with Alternative 3 are consistent with CAP assumptions for the area. The estimated increases in ROG, NO<sub>x</sub>, and PM<sub>10</sub> emissions represent less than 0.02 percent of the estimated baseline emissions in the Bay Area Air Basin (see Table 4.10-1). Traffic-related increases in carbon monoxide levels would not exceed Federal or state air quality standards (see Appendix E). Consequently, Alternative 3 is not expected to cause a change in Federal or state air quality attainment designations. No mitigation is required.

*Airborne Asbestos Fibers from Demolition and Airborne Dust from Construction and Demolition (Factor 3).* As described for Alternative 1, this would be a less than significant impact. No mitigation is required.

*On-Site Industrial Emissions of Toxic Air Contaminants (Factor 3).* As described for Alternative 1, this would be a less than significant impact. No mitigation is required.

*Objectionable Odors Associated with Off-Site Industrial Activity (Factor 4).* Because this alternative would have limited development and no residential component, objectionable odors from nearby industrial uses are considered less than significant. No mitigation is required.

*Objectionable Odors Associated with On-Site Activity (Factor 4).* Alternative 3 would have limited development and no residential component. Objectionable odors from possible sewage treatment facilities are considered less than significant because of the limited amount of development proposed, lack of residential uses, availability of several suitable sites for treatment facilities sufficiently distant from proposed reuse areas, and the reduced sewage generation under this alternative. No mitigation is required.

#### **4.10.3 No Action Alternative**

Under the No Action Alternative, NFD Point Molate would remain a closed Federal property and would not be reused or redeveloped. No impacts on air quality are anticipated, and no mitigation is required.

## 4.11 NOISE

The ROI for noise is the NFD Point Molate property and an area approximately 0.5 miles (0.8 km) from the site. Noise could result from traffic, ongoing activities, construction, and demolition.

Factors considered in determining whether an alternative would have significant noise impacts include the extent or degree to which its implementation would 1) expose sensitive receptors to excessive noise, 2) permanently and noticeably increase ambient noise in a manner that could affect the use and enjoyment of adjacent areas of facilities, 3) locate a noise-sensitive reuse such that it is negatively affected by existing noise levels, or 4) result in temporary noise levels in excess of limits set by the City's Noise Ordinance.

### *Impact Discussion*

#### **Traffic Noise**

Development of the NFD Point Molate property under any of the reuse alternatives would intensify use of the area and potentially place noise-sensitive uses in proximity to existing or future noise sources. This is of greatest concern under Alternative 1, which places residential land uses in areas subject to noise from vehicular traffic along Western Drive. Three of the proposed residential development areas are adjacent to Western Drive. Traffic-generated noise levels within 50 feet (15 m) of the centerline of Western Drive exceed 60 on the A-weighted decibel scale (dBA) Community Noise Equivalent Level (CNEL) under all three community reuse alternatives (Table 4.11-1). Because there is a 6-dBA reduction in noise levels with every doubling of distance, all community reuse alternatives would be at or under 60 dBA at about 100 feet (30 m) from the roadway centerline. As described in Section 3.11, the City's Noise Ordinance establishes a maximum exterior noise level of 60 dBA CNEL for residential land uses. Therefore, depending on the location of residences within the residential-designated parcels and development of intervening sound-attenuating features (walls, berms, etc.), residences could be exposed to unacceptably high noise levels. Alternative 1 would require mitigation at distances less than 100 feet (30 m) to keep levels below the 60 dBA compatibility threshold.

**TABLE 4.11-1**  
**NOISE LEVELS AT 50 FEET FROM ROADWAY CENTERLINE**

ALTERNATIVE	PEAK HOUR/ DAILY VEHICLE TRIPS	PEAK HOUR NOISE (dBA)	24-HOUR CNEL NOISE (dBA)
1	1,108/10,886	64	65
2	1,596/12,702	66	65
3	569/5,480	61	62

Note: All noise calculations are based on EIS/EIR traffic analysis assumptions and calculations.

Traffic noise from Western Drive could affect areas of the City's beach park that are within 100 feet (30 m) of Western Drive. However, these are primarily parking areas, with the beach and picnic areas beyond the 100-foot (30-m) impact zone. Therefore, traffic-generated noise would not be expected to significantly adversely affect the park areas. Similarly, the proposed open space/recreation areas along the shoreline and on the hillsides are over 100 feet (30 m) from the centerline of Western Drive.

Traffic on I-580 is approximately 0.3 miles (480 m) from the property. Noise from I-580 is less than 65 dBA at approximately 0.2 miles (320 m) from the freeway. Therefore, the alternatives would not be subject to potential noise/land use compatibility problems associated with I-580.

Ferry noise associated with engines and horns could exceed 60 dBA at up to 400 feet (122 m). However, because the end of the pier is over 1,200 feet (370 m) from the shore, this effect is not expected to be significant.

#### **On-Site Noise Compatibility**

There is some potential for noise associated with light industrial uses to affect residential and open-space uses. However, the effects of light industrial uses are typically reduced to less than significant levels by locating noise-generating uses indoors.

#### **Construction and Demolition Noise**

If development of NFD Point Molate is phased, residential areas developed in earlier phases could be adversely affected by construction noise from light industrial development during later phases. Construction noise levels associated with excavation, ground clearing, building erection, and finishing work would range up to 84-89 dBA Noise Equivalent Level, depending on the construction activity. These noise levels could disturb both residential and commercial occupants of the site. However, as described in Section 3.11, the duration and timing of these noise sources are regulated by the City's Noise Ordinance.

#### **Consistency with Plans and Policies**

Upon transfer of the facility out of Federal jurisdiction, the Federal Noise Control Act would no longer apply to the NFD Point Molate property. With regard to the City's Noise Ordinance, some of the residences proposed under Alternative 1 could be located in areas that would be exposed to traffic noise levels in excess of 60 dBA CNEL, which would not be in compliance with this ordinance.

Depending on the exact location of the residences in the residential-designated parcels and structural noise buffering applied to residential areas, noise levels could exceed state and local noise/land use compatibility guidelines. Potential exceedance of the guidelines would need to be assessed at the time specific development plans are

proposed for the residential areas if Alternative 1 is adopted. Project construction and demolition activities would be required to comply with the City's Noise Ordinance.

#### 4.11.1 Navy Disposal Action

The disposal of NFD Point Molate out of Federal ownership would not result in any noise impacts.

#### 4.11.2 Community Reuse Alternatives

##### *Alternative 1: Residential/Commercial*

##### **Significant and Mitigable Impacts (CEQA)/Less Than Significant Impacts (NEPA)**

The traffic noise impacts presented below are considered significant and mitigable under CEQA and less than significant under NEPA. Navy considers the proposed mitigation measure for the impacts under CEQA to be adopted standards that would be implemented as part of this alternative rather than as mitigation. Therefore, under NEPA, these potential impacts are less than significant, and no mitigation is required.

*Impact 1: Traffic Noise on Western Drive (Factors 1 and 2).* Daily average and peak-hour traffic noise associated with this alternative would exceed 60 dBA at distances within about 100 feet (30 m) of the centerline of Western Drive (see Table 4.11-1).

*Mitigation 1.* Either provide new residential development with 100-foot (30-m) setbacks from the centerline of Western Drive or incorporate structural sound attenuation features (e.g., sound walls or berms) to reduce traffic noise levels at residential parcels near Western Drive to less than 60 dBA during the peak traffic hour. Implementing either of these measures would reduce this impact to a less than significant level. In addition, consider incorporating traffic speed control measures to further reduce traffic noise levels.

*Impact 2: Construction and Demolition Noise (Factor 4).* Project construction and demolition activities have the potential for causing temporary disturbance to proposed adjacent residential land uses if those residential uses are developed and occupied before completion of other elements of Alternative 1.

*Mitigation 2.* Limit construction and demolition activities to daytime hours between 7 A.M. and 6 P.M. weekdays, excluding holidays. Ensure that construction equipment and vehicles use mufflers to minimize noise and are tuned to meet Department of Motor Vehicle Standards.

##### **Less Than Significant Impacts**

*Other Traffic Noise (Factors 1 and 2).* As described in the impact discussion, potential future water transportation use of the pier would not be a significant noise source. Similarly, noise from I-580 would not result in a significant impact due to its distance from the NFD Point Molate property. No mitigation is required.

108 *On-Site Noise Compatibility (Factor 3).* As described in the impact discussion, light  
109 industrial uses could result in incompatible on-site noise levels. However, these would  
110 be reduced to less than significant levels by required compliance with the City's Noise  
111 Ordinance. No mitigation is required.

112 ***Alternative 2: Industrial/Commercial***

113 ***Less Than Significant Impacts***

114 *Traffic Noise on Western Drive (Factors 1 and 2).* Traffic noise would be compatible with  
115 commercial and industrial land uses proposed in Alternative 2. No mitigation is  
116 required.

117 *Other Traffic Noise (Factors 1 and 2).* As described in the impact discussion, potential  
118 future water transportation use of the property pier would not be a significant noise  
119 source. Similarly, noise from I-580 would be attenuated to insignificant levels due to its  
120 distance from the NFD Point Molate property. No mitigation is required.

121 *On-Site Noise Compatibility (Factor 3).* As described for Alternative 1, this potential  
122 impact would be less than significant. No mitigation is required.

123 *Construction and Demolition Noise (Factor 4).* This alternative has no noise-sensitive land  
124 uses (such as residential) on the property, and off-site sensitive land uses are sufficiently  
125 distant from the property such that construction noise would be attenuated to  
126 insignificant levels. Compliance with the City's Noise Ordinance would limit  
127 construction and demolition noise impacts to less than significant levels. No mitigation  
128 is required.

129 ***Alternative 3: Recreation/Commercial***

130 ***Less Than Significant Impacts***

131 *Traffic Noise on Western Drive (Factors 1 and 2).* Traffic noise generated under Alternative  
132 3 would be compatible with the proposed land uses. No mitigation is required.

133 *Other Traffic Noise (Factors 1 and 2).* As described in the impact discussion, potential  
134 future water transportation use of the property pier would not be a significant noise  
135 source. Similarly, noise from I-580 would be attenuated to insignificant levels due to its  
136 distance from the NFD Point Molate property. No mitigation is required.

137 *On-Site Noise Compatibility (Factor 3).* As described for Alternative 1, this potential  
138 impact would be less than significant. No mitigation is required.

139 *Construction and Demolition Noise (Factor 4).* As described for Alternative 2, this potential  
140 impact would be less than significant. No mitigation is required.

**4.11.3 No Action Alternative**

Under the No Action Alternative, NFD Point Molate would remain a closed Federal property and would not be reused or redeveloped. No noise impacts are anticipated, and no mitigation is required.



## 4.12 UTILITIES

The ROI for utilities is the NFD Point Molate property and the service areas of the service providers.

Factors considered in determining whether an alternative would have a significant impact on utilities include the extent or degree to which its implementation would 1) increase utility demand to a level in excess of current or planned capacity for major utility system components, such as reservoirs, wastewater treatment plants, or landfills; or 2) cause the utility provider to violate any applicable legal or regulatory environmental standard or requirement.

### *Impact Discussion*

When NFD Point Molate was in operation, Navy operated most of the utility systems at the property. In September 1995, the property was placed into caretaker status. In April 1998, Navy entered into a cooperative agreement with the City under which the City manages the operation and maintenance of the Navy-owned utility systems at the NFD Point Molate property.

The Draft Reuse Plan outlines needed improvements to the Navy-owned utility systems. Because they are part of the Draft Reuse Plan, these improvements are considered components of each community reuse alternative.

### *Water Demand and Supply*

Using East Bay Municipal Utility District (EBMUD) guidelines, potable water usage for Alternative 1 is estimated to be an average of 209,330 gallons per day (gpd) (792,400 liters per day [lpd]). The maximum potable water usage is estimated to be 355,861 gpd (1,347,080 lpd). The projected fire flow need is 1,000 to 4,000 gpm (3,800 to 15,000 lpm) (City of Richmond and Bay Area Defense Conversion Action Team 1999). The City's minimum standard for fire flows is 1,500 gpm (5,700 lpm). The existing water distribution system currently does not have sufficient capacity for these flows.

For the provision of potable and fire protection water, the City's Master Utility Plan (City of Richmond and Bay Area Defense Conversion Action Team 1999) proposes the reuse of the existing distribution system to the extent possible, with replacement or expansion to new development areas (Central and Southern Development Areas) over time. The Master Utility Plan assumes phased development of the Core Historic District in 1 to 5 years, the Northern Development Area in 6 to 10 years, and the Central and Southern Development Areas in 11 to 20 years. The EBMUD 12-inch (30-centimeter) water main through the site (beneath Western Drive) would serve as the backbone for future expansion. This main has adequate capacity to serve project needs.

**Wastewater**

According to the Master Utility Plan, the existing sewer piping system would need to be rehabilitated or replaced with the same size or larger diameter pipes to accommodate reuse under any of the alternatives. The existing wastewater treatment plant would be closed but not removed under the Installation Restoration Program (IRP). The existing treatment plant could be reopened, but it is unlikely to meet NPDES permit requirements, and it would not have adequate capacity to serve the entire development. The facility also could be replaced with an equivalent plant. However, such a plant would only have adequate capacity to accommodate the uses proposed in the Core Historic District. To accommodate the uses in the Northern, Central, and Southern Development Areas, a second plant or one large treatment plant that could accommodate all site development would be necessary.

**Electricity and Natural Gas**

Based on guidelines by the National Electric Code, American Society of Heating, Refrigeration, and Air-Conditioning Engineers, and standard industry practice, the demand for electricity is projected to be 9,251 kilowatts total usage (HLA 1999). Pacific Gas and Electric Company (PG&E) would install and maintain electrical lines at or to the point of connection on the NFD Point Molate property. PG&E would install and maintain natural gas distribution lines and connections. Developers would be responsible for the cost of installation from the point of connection.

The City's Master Utility Plan proposes initial (1 to 5 years) reuse of the existing overhead distribution network, with conversion to PG&E standards in 6 to 10 years. In later years (11 to 20) the overhead system would be replaced with an underground system to enhance reliability and aesthetics. PG&E has adequate generating capacity for all reuse alternatives.

Currently there is no natural gas service on site. According to the Master Utility Plan, PG&E maintains a gas main line approximately 3 miles (4.8 km) from NFD Point Molate. A new line could be brought into the site along Western Drive. Other gas service providers could also be considered.

**Telecommunications**

The demand for telecommunications services would increase. The total number of telephone lines required under reuse is estimated to be 1,800 to 2,000 (HLA 1999). Pacific Bell would work with developers to accommodate demand for new lines. Pacific Bell has capacity to accommodate this demand.

The City's Master Utility Plan proposes initial reuse of the existing overhead distribution network. The overhead system would be replaced with an underground

system with high-capacity fiber optics in 6 to 20 years to enhance reliability and aesthetics.

#### **Solid Waste**

The amount of solid waste generated by Alternative 1 would be approximately 1,300 tons (1,180 metric tons) of demolition debris, using a generation factor of 72 pounds per square foot (350 kilograms [kg] per square meter [m<sup>2</sup>]). Construction activities would generate approximately 1,800 tons (1,630 metric tons), using a generation factor of 4 pounds per square foot (19 kg per m<sup>2</sup>) for residential and 2.5 pounds per square foot (12 kg per m<sup>2</sup>) for other land uses. During occupancy, Alternative 1 would generate approximately 930 tons (840 metric tons) per year, using a factor of 1.35 tons (1.2 metric tons) annually per employee and 1.02 tons (0.9 metric tons) annually per dwelling unit. Recycling material would reduce the amount of solid waste. Richmond Sanitary Service can provide service, and there is sufficient capacity at the West Contra Costa Sanitary Landfill (Richmond Sanitary Service 2000). After the landfill closes, solid waste would be trucked to the Integrated Resource Recovery Facility in North Richmond and then hauled to the Potrero Hills Landfill in Solano County.

Solid waste generation under Alternative 2 would be approximately 1,770 tons (1,610 metric tons) for construction and 300 tons (270 metric tons) annually during occupancy. The amount of demolition debris would be similar to that under Alternative 1.

Solid waste generation under Alternative 3 would be approximately 470 tons (430 metric tons) for construction and 170 tons (150 metric tons) annually during occupancy. The amount of demolition debris would be similar to that under Alternative 1.

#### **Consistency with Plans and Policies**

Following conveyance of Federal property from Federal ownership, future development of the NFD Point Molate property would be under City jurisdiction and subject to the policies regarding utilities that are set forth in the City's General Plan. All utilities would be required to comply with Federal, state and local laws, as well as the City's performance standards. For example, the City would coordinate with EBMUD to ensure an adequate water system for existing and future residents and the maintenance of adequate water reserves.

##### **4.12.1 Navy Disposal Action**

The disposal of NFD Point Molate out of Federal ownership would not result in any impacts on utilities.

#### 4.12.2 Community Reuse Alternatives

EBMUD, PG&E, Pacific Bell, and the Richmond Sanitation Service would continue to provide potable water, electricity, heating, telephone, and solid waste management services to the NFD Point Molate property. These providers have indicated that they have sufficient capacity to provide services for all three reuse alternatives. Sanitary sewer services would be provided by the Richmond Municipal Sewer District if the option to connect to the District plant, or the option to haul wastewater to the plant, is chosen. The District plant has sufficient capacity to handle the NFD Point Molate property's wastewater for the community reuse alternatives (Richmond Municipal Sewer District 1998a).

##### *Alternative 1: Residential/Commercial*

##### **Significant and Mitigable Impact**

*Impact 1: Sanitary Sewer System (Factors 1 and 2).* The NFD Point Molate sewage treatment plant does not have the capacity to handle the maximum wastewater load of 360,000 gpd (1,400,000 lpd) estimated for this alternative (HLA 1999).

*Mitigation 1.* The City's Master Utility Plan considers three options to meet the sanitary sewer system needs of Alternative 1: (1) expand the existing sewage treatment plant or construct a new treatment plant and collection system on site, (2) treat some wastewater on site and haul the excess to the Richmond Municipal Sewer District plant for treatment, and (3) construct a new pipeline and pumping system that would transfer all the wastewater to the Richmond Municipal Sewer District plant. Implementation of any one of these measures would reduce this impact to a less than significant level.

The Draft Reuse Plan does not incorporate expansion of the existing sewage treatment plant or siting of a new facility (Option 1) in the physical layout and design of NFD Point Molate. Therefore, reuse and/or expansion of the existing sewage treatment plant could infringe on the planned uses for the sewage treatment plant area. The Draft Reuse Plan also does not indicate a site for a new treatment plant. A new facility could possibly conflict with proposed land uses or impact a previously undisturbed area of the site. Under Option 2, the existing facility could be reused or a new one constructed; however, it could be smaller than the facility required under Option 1 because some wastewater would be hauled off site. Option 3 would not conflict with reuse or infringe on the existing layout for reuse, since no stationary facility would be required.

Secondary environmental impacts associated with the sewage treatment plant options discussed above could result in significant environmental impacts. Options 1 and 2 could require a site at a low elevation, possibly near the Bay, that could be within BCDC jurisdiction, wetlands, or other sensitive habitat. There could be odor impacts associated with the facility, as well as water quality impacts on the Bay from effluent

discharge. Option 3 would have fewer on-site impacts, but construction of a pipeline to the Richmond Municipal Sewer District treatment plant could involve alignments that could have other utility or infrastructure impacts, as well as biological or visual impacts. Environmental assessment of the selected option would occur when a specific project is proposed. At this stage in the planning process, secondary impacts from the wastewater treatment facility are speculative because specific designs and/or sites have not been identified, and further field investigations are required (City of Richmond and Bay Area Defense Conversion Action Team 1999).

#### **Significant and Mitigable Impact (CEQA)/Less Than Significant Impact (NEPA)**

Impact 2 regarding the water distribution system presented below is considered significant and mitigable under CEQA and less than significant under NEPA. Navy considers the proposed mitigation measure for the impact under CEQA to be an adopted standard that would be implemented as part of this alternative rather than as mitigation. Therefore, under NEPA, this potential impact is less than significant, and no mitigation is required.

*Impact 2: Water Distribution System (Factors 1 and 2).* As described in the impact discussion, the existing water distribution system does not have the capacity to serve the estimated need for this alternative.

*Mitigation 2.* Replace and upgrade the water distribution system. Ensure that the distribution lines for drinking water meet EBMUD standards and comply with American Water Works Association standards. Test the fire protection system and upgrade for adequate water pressure. Install individual water meters and integrate water conservation measures into building design and construction. Use equipment, devices, and methodologies that conserve water and provide for long-term efficient water use. Use drought-resistant or native plants, inert materials, and install minimal turf areas. Implementing these measures would reduce this impact to a less than significant level.

Secondary impacts associated with improvement and expansion of the water distribution system would most likely be minor because pipelines would be buried in existing roadways or previously disturbed areas. Environmental assessment of the selected option would occur when a specific project is proposed. At this stage in the planning process, secondary impacts from the expansion of the water distribution system are speculative because specific designs and/or sites have not been identified, and further field investigations are required (City of Richmond and Bay Area Defense Conversion Action Team 1999).

**Less Than Significant Impacts**

*Electrical and Gas Systems (Factors 1 and 2).* PG&E has sufficient electrical and gas capacity for this alternative (PG&E 1998). Developers would be responsible for the on-site electrical distribution system from the PG&E point of connection. This alternative would have a less than significant impact on PG&E's provision of electrical power and natural gas. No mitigation is required.

*Telecommunications System (Factors 1 and 2).* As described in the impact discussion, Pacific Bell has the capacity to accommodate the demand projected for Alternative 1. Therefore, there would be a less than significant impact on telecommunication services. No mitigation is required.

*Solid Waste Management (Factors 1 and 2).* As described in the impact discussion, the Richmond Sanitation Service can accommodate the demand projected for Alternative 1. Therefore, there would be a less than significant impact on the provision of solid waste management services. No mitigation is required.

Based on the Master Utility Plan (City of Richmond and Bay Area Defense Conversion Action Team 1999), the provision of electricity, gas, and telecommunications services could require replacement and extension of the existing systems under Alternative 1. Secondary impacts associated with improvement and expansion of these systems would most likely be minor because the power lines, pipelines, telecommunications lines, and possibly fiber optic cables would be buried in existing roadways or previously disturbed areas. Environmental assessment of the selected option would occur when a specific project is proposed. At this stage in the planning process, secondary impacts from expansion of these systems are speculative because specific designs and/or sites have not been identified, and further field investigations are required (City of Richmond and Bay Area Defense Conversion Action Team 1999).

**Alternative 2: Industrial/Commercial****Significant and Mitigable Impact**

*Impact 1: Sanitary Sewer System (Factors 1 and 2).* The NFD Point Molate sewage treatment plant does not have the capacity to handle the increased wastewater load, which would be greater than under Alternative 1.

*Mitigation 1.* Mitigation measures are the same as Mitigation 1, Alternative 1. Implementing these measures would reduce this impact to a less than significant level.

**Significant and Mitigable Impact (CEQA)/Less Than Significant Impact (NEPA)**

Impact 2 regarding the water distribution system presented below is considered significant and mitigable under CEQA and less than significant under NEPA. The Navy

considers the proposed mitigation measure for the impact under CEQA to be an adopted regulatory standard that would be implemented as part of this alternative rather than as mitigation. Therefore, under NEPA, this potential impact is less than significant, and no mitigation is required.

*Impact 2: Water Distribution System (Factors 1 and 2).* Potable water usage would be greater than under Alternative 1. As described for Alternative 1, the existing water system does not have the capacity to serve the potable water or fire flow needs projected for this alternative.

*Mitigation 2.* Mitigation measures are the same as Mitigation 2, Alternative 1. Implementing these measures would reduce this impact to a less than significant level.

#### **Less Than Significant Impacts**

*Electrical and Gas Systems (Factors 1 and 2).* This potential impact would be similar to that under Alternative 1. No mitigation is required.

*Telecommunications System (Factors 1 and 2).* This potential impact would be similar to that under Alternative 1. No mitigation is required.

*Solid Waste Management (Factors 1 and 2).* This potential impact would be similar to that under Alternative 1. No mitigation is required.

#### **Alternative 3: Recreation/Commercial**

##### **Significant and Mitigable Impact**

*Impact 1: Sanitary Sewer System (Factors 1 and 2).* This alternative would have the least wastewater load among the three community reuse alternatives but would still exceed the capacity of the NFD Point Molate sewage treatment plant.

*Mitigation 1.* Mitigation measures are the same as Mitigation 1, Alternative 1. Implementing the measures would reduce the impact to a less than significant level.

##### **Significant and Mitigable Impact (CEQA)/Less Than Significant Impact (NEPA)**

Impact 2 regarding the water distribution system presented below is considered significant and mitigable under CEQA and less than significant under NEPA. Navy considers the proposed mitigation measure for the impact under CEQA to be an adopted regulatory standard that would be implemented as part of this alternative rather than as mitigation. Therefore, under NEPA, this potential impact is less than significant, and no mitigation is required.

243 *Impact 2: Water Distribution System (Factors 1 and 2).* Potable water usage would be the  
244 least among the three alternatives but would still exceed the capacity of the existing  
245 water system to serve the potable water or fire flow needs projected for this alternative.

246 *Mitigation 2.* Mitigation measures are the same as Mitigation 2, Alternative 1.  
247 Implementing these measures would reduce this impact to a less than significant level.

#### 248 **Less Than Significant Impacts**

249 *Electrical and Gas Systems (Factors 1 and 2).* Electrical demand would be less than under  
250 Alternatives 1 and 2. PG&E has sufficient capacity to accommodate projected demand.  
251 No mitigation is required.

252 *Telecommunications System (Factors 1 and 2).* Requirements for telecommunications  
253 systems would be less than under Alternatives 1 and 2. Pacific Bell has the capacity to  
254 accommodate projected demand. No mitigation is required.

255 *Solid Waste Management (Factors 1 and 2).* Solid waste generation would be less than  
256 under Alternatives 1 and 2. The Richmond Sanitation Service can accommodate  
257 projected demand. No mitigation is required.

#### 258 **4.12.3 No Action Alternative**

259 Under the No Action Alternative, NFD Point Molate would remain a closed Federal  
260 property and would not be reused or redeveloped. No impacts on utilities are expected,  
261 and no mitigation is required.



## 4.13 HAZARDOUS MATERIALS AND WASTE

The ROI for hazardous materials and waste is the NFD Point Molate property. Hazardous materials and waste transportation along Western Drive (originating from existing nearby businesses) would be unaffected by the project.

Factors considered in determining whether an alternative would have a significant impact related to hazardous materials and wastes include the extent or degree to which its implementation would 1) create a hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials, 2) create a hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the likely release of hazardous materials into the environment, 3) be reasonably anticipated to emit hazardous emissions or require the handling of hazardous or acutely hazardous materials, substances, or wastes, or 4) create a significant hazard of exposure to past contamination.

### *Impact Discussion*

Hazardous materials and waste include volatile organic compounds, heavy metals, petroleum hydrocarbons, lead-based paint (LBP), and asbestos-containing materials (ACM).

### **Transport, Use, and Disposal of Hazardous Materials and Wastes**

High levels of hazardous materials use and waste generation are not expected from the types of businesses envisioned under the Draft Reuse Plan. Hazardous materials use and waste generation would increase to some degree as the property is developed. In residential areas, hazardous materials in the form of cleaning supplies, solvents, oil-based paint, pesticides, herbicides, and automotive products could be used by residents. Commercial and light industrial occupants could use a variety of petroleum products and solvents as a part of their businesses. Industries generating hazardous waste under reuse would be primarily small quantity generators, but exact quantities of materials to be used or wastes generated are not known and cannot be quantified at this time.

Federal and state laws govern the transportation of hazardous materials and waste. The upgrade of Western Drive to serve development under reuse (see Section 4.9.2) would be adequate to safely transport the types and amounts of hazardous materials and waste expected at the site. No significant impacts related to hazardous materials use or hazardous waste generation are anticipated after NFD Point Molate property conveyance, because Federal, state, and local laws require procedures and practices to ensure that hazardous materials are properly used, stored, and disposed of to prevent or minimize injury to human health and the environment. These laws, such as the Resource Conservation and Recovery Act (RCRA) and Proposition 65, also include

provisions for labeling and notification of employees about potential environmental hazards or chemicals in the work place. Users of certain materials could be required to prepare Risk Management Plans under the California Accidental Release Prevention Program (California Public Safety Code, Title 19 §§ 2735.1-2785.1).

Users would also have to comply with Contra Costa County and City requirements for businesses to write and submit a Hazardous Waste Management Plan identifying, at a minimum, a system to identify, track, store, use, and dispose of hazardous materials and waste. Users of hazardous materials are required to obtain a conditional use permit through the City's permitting process as required by Section 15.04.820.020 of the Zoning Ordinance. This system, and the City and county's enforcement activities, minimize the potential for workers and the public to be adversely exposed to hazardous substances and minimize the potential for accidental releases to adversely affect soil and groundwater.

#### **Release of Hazardous Materials or Hazardous Emissions**

Compliance with Federal, state, county, and City requirements for the use of hazardous materials and the generation and disposal of hazardous wastes, described above, would minimize the potential of accidental releases of these substances into the environment.

LBP is a potential concern where the public or construction workers could be exposed to lead through inhalation or hand-to-mouth contact with contaminated dust and soil. Navy has established that LBP and lead-contaminated dust are present inside the 29 Winehaven cottages and in soil outside the cottages. The acquiring entity would be required to notify contractors of the potential lead hazard prior to renovation and demolition activities. Contractors are required to manage LBP on building materials in accordance with Federal Occupational and Safety and Health Administration, California Occupational Safety and Health Administration (CAL OSHA), Department of Toxic Substances Control (DTSC), and BAAQMD regulations and applicable Federal, state, and local laws, including California Code of Regulations Titles 22 and 23. Future owners and users at NFD Point Molate would be responsible for complying with applicable state and local regulations concerning LBP.

The cottages are not planned for residential reuse. However, if reuse has the potential to expose children to either LBP or soils with elevated lead concentrations (for example, if the cottages were used for child care), then the acquiring entity would need to evaluate the LBP and soil chemical data against desired target levels and assess whether remediation is necessary to reduce lead exposure to children.

ACM remaining in the buildings at the time of transfer will be in good condition (ACM intact and able to contain asbestos fibers). ACM in good condition is not considered to

pose a risk to human health or the environment. The acquiring entity would be required to manage these materials in accordance with Federal, state, and local laws. Contractors and haulers of asbestos materials from the site would be required to manage such materials in accordance with CAL OSHA, U.S. Environmental Protection Agency (U.S. EPA), DTSC, and BAAQMD regulations.

#### **Exposure to Past Contamination**

Reuse would not affect existing environmental contamination at NFD Point Molate. Prior to real property conveyance, Navy is required by law to remediate the property to a level consistent with the protection of human health and the environment, taking into consideration the intended land uses. In all cases where the release or disposal of hazardous substances or petroleum products has occurred, the conveyance of the property must be preceded by a Finding of Suitability to Transfer, in which Navy seeks concurrence from the lead regulatory agency. Property recipients are advised and notified of the environmental condition of the property, and appropriate covenants, conditions, and restrictions are included in the conveyance document to ensure protection of human health and the environment, taking into consideration the intended land uses.

Property affected by release or disposal of hazardous substances or any petroleum product or its derivatives may be conveyed before all necessary remedial action has been completed if certain conditions for deferral of the covenant required by § 120 of the Comprehensive Environmental Response, Compensation, and Liability Act, 42 U.S.C. §§ 9606-9675, have been met. These conditions include the following:

- Agreement by U.S. EPA and the state that the property is suitable for the intended use and that the intended use will be protective of human health and the environment.
- Public notice and comment.
- Property use restrictions, if necessary, to ensure that human health and the environment are protected and that the necessary remedial actions can take place.
- Assurances from the Federal government that conveyance of the property will not substantially delay response actions at the property and that the necessary response actions will be completed after conveyance.

The IRP, which Navy will continue to implement regardless of the decision made with respect to the proposed disposal and reuse, will reduce potential risks to human health and the environment at NFD Point Molate from past contamination to acceptable levels.

### Consistency with Plans and Policies

Redevelopment at the NFD Point Molate property is consistent with plans and policies pertaining to hazardous materials and waste. In addition to Federal and state laws regulating the use, storage, disposal, and transportation of hazardous materials, the City regulates all projects and activities that involve hazardous materials and waste through its Zoning Ordinance (see Section 3.13.4). Remediation of soil and groundwater with oversight by regulatory agencies would allow for development of the site as planned. All USTs and ASTs will be in compliance prior to property conveyance. Buildings containing lead-contaminated dust will be compliant as long as cleanup, renovation, and demolition are conducted in accordance with CAL OSHA regulations. The buildings will be compliant with asbestos regulations as long as ACM is properly managed in place in accordance with Federal, state, and local regulations.

#### 4.13.1 Navy Disposal Action

The disposal of NFD Point Molate out of Federal ownership would not result in any impacts related to hazardous materials and waste. Navy would remediate hazardous substances to a level consistent with the protection of human health and the environment for the intended use. If conveying property before completion of the required response actions under the applicable authority, Navy would ensure that the property is suitable for conveyance for the use intended and that the intended use is consistent with the protection of human health and the environment. Future property recipients would be advised and notified of the environmental condition of the property, and legally enforceable covenants, conditions, and restrictions would be included in the conveyance document to ensure protection of human health and the environment.

#### 4.13.2 Community Reuse Alternatives

##### *Alternative 1: Residential/Commercial*

##### **Less Than Significant Impacts**

*Hazardous Materials Transport, Use, and Waste Generation (Factors 1 and 2).* Compliance with Federal, state, and local hazardous materials and waste requirements would reduce potential impacts associated with the transport, use, and disposal of hazardous materials and wastes to a less than significant level. No mitigation is required.

*Lead-Based Paint Hazards (Factor 3).* The public or construction workers could be exposed to lead through inhalation or hand-to-mouth contact with lead-contaminated dust and soil. Compliance with Federal and state regulations would reduce this potential impact to a less than significant level. No mitigation is required.

*Asbestos-Containing Materials (Factor 3).* Contractors and haulers of ACM from the site could be exposed to asbestos through inhalation. Compliance with Federal, state, and

local regulations would reduce this potential impact to a less than significant level. No mitigation is required.

*Risk of Exposure to Past Contamination (Factor 4).* The risk of exposure to hazardous constituents as a result of past contamination at NFD Point Molate has been and continues to be addressed through the IRP, as described in Section 3.13. As a result of this independent and ongoing cleanup effort, the purpose of which is to eliminate or reduce the risk posed by past contamination to acceptable levels, the reuse of NFD Point Molate would not pose a significant hazard to the public or the environment from past contamination. No mitigation is required.

#### ***Alternative 2: Industrial/Commercial***

##### **Less Than Significant Impacts**

*Hazardous Materials Transport, Use, and Waste Generation (Factors 1 and 2).* Alternative 2 would result in greater hazardous materials use and waste generation than under Alternative 1, because there would be more light industrial development. Compliance with Federal, state, and local hazardous materials and waste requirements would reduce potential impacts associated with the transport, use, and disposal of hazardous materials and wastes to a less than significant level. No mitigation is required.

*Lead-Based Paint Hazards (Factor 3).* The public or construction workers could be exposed to lead through inhalation or hand-to-mouth contact with lead-contaminated dust and soil. Compliance with Federal and state regulations would reduce this potential impact to a less than significant level. No mitigation is required.

*Asbestos-Containing Materials (Factor 3).* Contractors and haulers of ACM from the site could be exposed to asbestos through inhalation. Compliance with Federal, state, and local regulations would reduce this potential impact to a less than significant level. No mitigation is required.

*Risk of Exposure to Past Contamination (Factor 4).* As described for Alternative 1, potential impacts would be less than significant. No mitigation is required.

#### ***Alternative 3: Recreation/Commercial***

##### **Less Than Significant Impacts**

*Hazardous Materials Use and Waste Generation (Factors 1 and 2).* Alternative 3 would have less commercial and light industrial square footage developed than under Alternative 1 or 2. Compliance with Federal, state, and local regulations would ensure that potential impacts would be less than significant. No mitigation is required.

177 *Lead-Based Paint Hazards (Factor 3).* The public or construction workers could be exposed  
178 to lead through inhalation or hand-to-mouth contact with lead-contaminated dust and  
179 soil. Compliance with Federal and state regulations would reduce this potential impact  
180 to a less than significant level. No mitigation is required.

181 *Asbestos-Containing Materials (Factor 3).* Contractors and haulers of ACM from the site  
182 could be exposed to asbestos through inhalation. Compliance with Federal, state, and  
183 local regulations would reduce this potential impact to a less than significant level. No  
184 mitigation is required.

185 *Risk of Exposure to Past Contamination (Factor 4).* As described for Alternative 1, potential  
186 impacts would be less than significant. No mitigation is required.

#### 187 **4.13.3 No Action Alternative**

188 Under the No Action Alternative, NFD Point Molate would remain a closed Federal  
189 property and would not be reused or redeveloped. No hazardous materials and waste  
190 impacts are anticipated, and no mitigation is required. The Navy IRP would continue  
191 until complete.

*This page intentionally left blank.*

A map of the Point Molloe area. The map shows the coastline of Point Molloe, which is a peninsula. The Naval Fuel Depot is located in the center of the peninsula, outlined with a dashed line. To the north of the depot is Point Orient. To the west of the depot is Point Molloe, with the NFO Point Molloe Pier located just south of it. To the east of the depot is Point Molloe Beach Park. The peninsula is bordered by the Pacific Ocean to the south and the Richmond-San Rafael Bridge to the west. The map also shows several roads: Highway 580 running along the coast, Highway 1 running north-south, and various local roads including Driscoll Dr, Driscoll Dr, and Highway 1. The map is labeled with 'Point Molloe' and 'Naval Fuel Depot Point Molloe'.



---

## CHAPTER 5: OTHER CONSIDERATIONS AND FEDERAL EXECUTIVE ORDERS

---

### CONTENTS

Page

5.1	Cumulative Impacts .....	5-1
5.2	Significant Unmitigable Adverse Impacts .....	5-4
5.3	Short-Term Uses and Long-Term Productivity.....	5-4
5.4	Irreversible/Irretrievable Commitments of Resources.....	5-5
5.5	Growth-Inducing Impacts (CEQA Only).....	5-5
5.6	Environmental Justice .....	5-6
5.7	Protection of Children from Environmental Health Risks and Safety Risks .....	5-8

## 5. OTHER CONSIDERATIONS AND FEDERAL EXECUTIVE ORDERS

This chapter discusses other topics required by the National Environmental Policy Act (NEPA) and/or California Environmental Quality Act (CEQA) to be included in an Environmental Impact Statement/Environmental Impact Report (EIS/EIR). NEPA requires that an EIS identify and describe unavoidable adverse effects; consider short-term uses and long-term productivity; consider the irreversible or irretrievable commitment of resources; and consider cumulative impacts when they are significant. CEQA requires that an EIR identify and analyze significant irreversible environmental changes and growth-inducing impacts.

This chapter also discusses Executive Order (E.O.) 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, 3 Code of Federal Regulations (C.F.R.) 859 (1995), reprinted in 42 United States Code (U.S.C.) § 4321 note at 475-79, and E.O. 13045, Protection of Children from Environmental Health Risks and Safety Risks, 3 C.F.R. 198 (1998) reprinted in 42 U.S.C. § 4321 note at 40-42 C.F.R..

### 5.1 CUMULATIVE IMPACTS

Both NEPA and CEQA require an EIS/EIR to consider cumulative impacts when they are significant (40 C.F.R. Section 1508.25[c] and CEQA Guidelines Section 15064[i]). If these impacts are not significant, the document should explain the basis for that conclusion. Cumulative impacts are individual effects that, when considered together, could create a collective impact that is significant. Such individual effects include "other closely related past, present, and reasonably foreseeable future projects" (40 C.F.R. 1508.7 and CEQA Guidelines Section 15355g).

#### 5.1.1 Cumulative Assumptions

Cumulative impacts can be assessed using either a "projection" approach or a "list" approach. This document uses a projection approach for socioeconomics and a list approach for land use, visual resources, public services, transportation, cultural resources, biological resources, water resources, geology and soils, air quality, noise, utilities, and hazardous materials and waste. The Association of Bay Area Governments (ABAG) Projections '98 has been used for the cumulative analysis of socioeconomics (Section 3.3, Socioeconomics).

#### 5.1.2 Reasonably Foreseeable Projects

Reasonably foreseeable future projects are the retrofit of the San Rafael-Richmond Bridge and the Red Rock Marina project at Red Rock Cove, located about 0.5 miles (0.8 km) south of the Fleet and Industrial Supply Center, Naval Fuel Depot Point Molate (NFD Point Molate). A previously proposed project near NFD Point Molate,

the Richmond Marine-Link Terminal (Wickland), has been withdrawn by the applicant (Wickland Pipelines LLC 1999).

The California Department of Transportation began the seismic retrofit of the Richmond-San Rafael Bridge in 1999 and expects to complete it by 2003. The project is statutorily exempt under CEQA and received a Categorical Exclusion pursuant to NEPA. The Federal Highway Administration is the lead agency, and the U.S. Coast Guard is a cooperating agency.

The proposed Red Rock Marina project is in the conceptual design phase. A new marina with slips, a commercial area, and parking lot might be developed after its potential use as a staging area for the seismic retrofit project. No development application has been submitted to the City of Richmond (City).

### 5.1.3 Potential Cumulative Impacts

The cumulative impacts of NFD Point Molate disposal and reuse—with projected regional growth, seismic retrofit of the Richmond-San Rafael Bridge, and the Red Rock Marina project—are discussed by resource area below. There would be no potentially significant project-plus-cumulative effects on cultural resources, biological resources, water resources, geology and soils, or hazardous materials and waste, so these are not addressed below. The lack of significant cumulative effects for these resources is a result of the site-specific nature of impacts and/or the lack of additive or overlapping effects.

#### *Land Use*

The community reuse alternatives, which comprise residential, visitor-serving commercial, and open-space/recreation uses, would be consistent with the proposed Red Rock Marina project. The reuse alternatives and the Red Rock Marina project would contribute to the overall increase in commercial/recreational uses on the San Pablo Peninsula.

#### *Visual Resources*

The reuse of the NFD Point Molate property, along with construction and operation of the proposed Red Rock Marina project, would alter the visual quality of the southern portions of the western shoreline of the San Pablo Peninsula. The visual character would be more developed, with the addition of docks, boats, buildings, and parking adjacent to land uses at NFD Point Molate. This is not considered to be an adverse cumulative impact.

### *Socioeconomics*

Population and employment effects of the reuse alternatives, as well as cumulative development in the area, would contribute incrementally to regional housing and population growth. However, the incremental contribution of the reuse of NFD Point Molate and other cumulative job/population growth would not have a significant adverse effect on regional housing demand or growth.

### *Public Services*

Implementation of any of the reuse alternatives, in combination with reasonably foreseeable projects, would further increase demand for City public services. It is expected that funding sources, such as additional economic activity associated with redevelopment of the project site, would be identified to increase service capability as required to provide adequate levels of service. Overall, cumulative impacts from additional economic activity associated with reuse of the property would be greatest under Alternative 1 and lowest under Alternative 3, due to their respective service demand levels.

### *Transportation*

The traffic analysis in Section 4.9 includes projected regional growth, except for the retrofit project for the Richmond-San Rafael Bridge and the Red Rock Marina project. The seismic retrofit project would have short-term construction impacts, which are expected to end in 2003. Traffic impacts would be less than significant. Development of the Red Rock Marina would also be expected to have less than significant traffic impacts. Impacts from the marina project would be analyzed in detail in an environmental review document that would be prepared pursuant to CEQA.

### *Utilities*

Implementation of any of the reuse alternatives, in combination with reasonably foreseeable projects, would cumulatively affect regional utility service providers. An exception to this could be sewage treatment, which is likely to be handled on site. The regional increase in development and population would increase the demand for services. It is anticipated that project and cumulative service demands could be adequately met by the various utilities providers. Therefore, no significant cumulative utilities impacts are anticipated.

### *Air Quality*

Implementing any of the reuse alternatives, along with other major developments in the region, would contribute to cumulative air pollutant emissions in the Bay Area. Cumulative air quality issues in the Bay Area are being addressed through regional air quality plans developed jointly by the Bay Area Air Quality Management District

(BAAQMD), ABAG, and the Metropolitan Transportation Commission. These plans reflect anticipated regional land use and transportation patterns. BAAQMD regulations require most new industrial facilities to fully offset emissions generated by their operations. Compliance with the plans would reduce potential impacts to a less than significant level.

### *Noise*

Traffic noise levels normally increase gradually with increasing traffic volume but may stabilize or decline if traffic speeds drop due to increasing congestion. NFD Point Molate reuse and the Red Rock Marina project would likely increase noise levels on Western Drive south of Red Rock Cove Road. However, there would be no cumulative noise impacts associated with the increase in traffic, because there are no sensitive noise receptors in this area. The cumulative effect of NFD Point Molate reuse with all the reasonably foreseeable projects would not result in cumulative noise effects, because the projects are sufficiently dispersed. Traffic from these future projects would converge on I-580, but the increase in noise levels would be small due to the overall capacity of the freeway and because the freeway has been designed to meet state noise standards at full capacity. Therefore, no cumulative noise impacts are anticipated.

## **5.2 SIGNIFICANT UNMITIGABLE ADVERSE IMPACTS**

Under NEPA and CEQA, an EIS/EIR must identify and describe any significant unavoidable adverse environmental impacts (impacts for which mitigation to less than significant levels is not feasible). Most issues addressed in this EIS/EIR would not result in significant unmitigable impacts. However, Alternative 1 would result in a significant unmitigable land use impact.

Under Alternative 1, residential use is proposed for the Southern, Central, and Northern Development Areas. All of the Southern Development Area and most of the Central and Northern Development Areas lie within the Alternate Release Scenario impact circle for ammonia as developed in Chevron's Risk Management Program. Because it would not be physically possible to provide an adequate buffer between sensitive receptors in these areas and the off-site sources of potential accidental release, introduction of residential uses in these areas would result in a significant unmitigable impact.

## **5.3 SHORT-TERM USES AND LONG-TERM PRODUCTIVITY**

NEPA requires that an EIS consider the relationship between short-term uses of the environment and the maintenance and enhancement of long-term productivity.

The productivity of NFD Point Molate has been related to its operation as a naval fuel depot from 1943–1995 and, before that, as a large commercial winery (1907–1919). Ecological productivity is associated with the undeveloped hillsides and habitats on the property. The fuel depot generated a small number of jobs and associated economic activity. Department of Navy (Navy) also preserved the historic winery structures on the site. Short- and long-term uses associated with the proposed reuse alternatives include providing jobs/employment, increasing the City's housing stock (Alternative 1 only), and providing opportunities for recreational and publicly oriented uses. The open space to be preserved under all three community reuse alternatives would conserve the environmental productivity of the site. The adaptive reuse and retention of listed or eligible structures on the National Register of Historic Places would also be a long-term benefit.

#### 5.4 IRREVERSIBLE/IRRETRIEVABLE COMMITMENTS OF RESOURCES

NEPA and CEQA require that an EIS/EIR consider the extent to which alternatives would result in primary and secondary effects that commit nonrenewable resources to uses that future generations probably would be unable to reverse.

Navy disposal of NFD Point Molate property and structures would increase options for reuse and for responsible long-term resource management.

Implementing any of the community reuse alternatives would require commitments of both renewable and nonrenewable energy and material resources for demolition and construction associated with reuse. Equipment used during construction and demolition activities would use petroleum fuels, such as gasoline and diesel. This energy expenditure would occur over the short term and would not substantially increase the overall demand for electricity or natural gas.

Development of NFD Point Molate would result in a long-term increase in the annual amount of energy consumed at the property. New development would be required to comply with building energy consumption requirements under the California Code of Regulations, Title 24, Building Energy Efficiency Standards. Community reuse would result in a long-term commitment of land for development. It also would increase long-term consumption of water resources by new on-site uses and of gasoline and diesel through the generation of additional vehicle trips.

#### 5.5 GROWTH-INDUCING IMPACTS (CEQA ONLY)

CEQA requires a discussion of the ways in which a proposed action and alternatives could spur economic growth, population growth, or housing development, either directly or indirectly, in the surrounding area. Induced growth, in contrast with the

direct growth of employment, population, and housing resulting from a project, concerns the secondary growth associated with the proposed action. An action can also induce growth by removing or lowering barriers to growth or by creating amenities that attract new residents or increased economic activity. Analysis of growth-inducing effects includes those characteristics of the action that could encourage and facilitate activities that would, either individually or cumulatively, affect the environment. For example, improvement of access routes could encourage growth in previously undeveloped areas. Growth can be considered beneficial, adverse, or of no significance environmentally, depending on its secondary effects on the physical environment.

The community reuse alternatives could set a precedent for commercial uses on the San Pablo Peninsula. In addition, Alternative 1 would introduce residential uses on the peninsula. Reuse would add wastewater treatment and natural gas service to the area, which could induce growth. However, because most of the land use on the peninsula is industrial, it is unlikely that reuse would induce changes in those land uses in the near future (beyond those currently being considered, e.g., the Red Rock Marina project). In the long term, if reuse is successful, it could encourage nearby industrial uses along Western Drive to convert to commercial or residential uses.

## 5.6 ENVIRONMENTAL JUSTICE

### 5.6.1 Introduction

On February 11, 1994, President Clinton issued the E.O. on Federal Actions to Address Environmental Justice in Minority and Low-income Populations (E.O. 12898, 3 C.F.R. 859 (1995), reprinted in 42 U.S.C. § 4321 note at 475-79). This order requires that "each Federal agency make achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations." On April 21, 1995, the Secretary of Defense submitted a formal environmental justice strategy and implementation plan to the U.S. Environmental Protection Agency (U.S. EPA) (U.S. Department of Defense 1995).

To comply with E.O. 12898, preparation of this EIS/EIR included the following actions:

- Gathering economic, racial, and demographic information from the 1990 U.S. census to identify areas of low-income and high minority populations in West Contra Costa County.
- Assessing the disposal and reuse actions for disproportionate impacts resulting from on-site activities associated with reuse of the site.

- Encouraging community participation and input through public hearings and meetings and extensive public notification (described in Section 1.6, Public Involvement Process).

#### 5.6.2 Criteria

A memorandum from the President to the Heads of Departments and agencies, which accompanied E.O. 12898, specified that mitigation measures outlined or analyzed in an environmental assessment, environmental impact statement, or record of decision, whenever feasible, should address significant and adverse environmental effects of proposed Federal actions on minority communities and low-income communities (CEQ 1997). Relative to environmental justice, a significant impact would occur if the proposed action, including the consideration of all resource issues, would result in disproportionate negative effects on minority populations or low-income populations.

#### 5.6.3 Minority Population and Low-Income Population Overview

The population of Richmond in 1990 was as follows: African American (42.8 percent), Hispanic (14.5 percent), Caucasian (30.7 percent), Asian/Pacific Islander (11.3 percent), American Indian (0.5 percent), and Other (0.2 percent).

The 1995 Survey of Buyer Power (Sales Marketing and Management) estimated the median household effective buying income, or net income, to be \$38,265 for the City, with 73 percent of all households realizing annual effective buying incomes of \$20,000 or more.

#### 5.6.4 Potential Disproportionate Impacts on Minority Populations or Low-Income Populations

The purpose of E.O. 12898 is to avoid placing a disproportionately high share of the adverse environmental or economic effects resulting from Federal policies and actions on minority and low-income populations. Specific requirements of this order and of Navy policy include the following:

- Ensure opportunities for community input to the NEPA process.
- Ensure that the public, including minority and low-income communities, has access to public information related to human health issues, environmental planning, regulation and enforcement.
- Analyze human health, economic, and social effects of the Federal action on minority and low-income communities, when such analysis is required by NEPA.
- Ensure that mitigation measures outlined or analyzed in an EIS address significant and adverse environmental effects of proposed Federal actions on minority and low-income communities.



- Ensure that all programs or activities under its control that receive financial assistance and that affect human health or the environment do not directly or indirectly use criteria, methods, or practices that discriminate on the basis of race, color, or national origin.

NFD Point Molate has ensured opportunities for community input throughout the NEPA process for NFD Point Molate. Copies of the Draft EIS/EIR were distributed to an extensive mailing list of agencies, organizations, and individuals thought to have an interest in the proposed action.

EIS/EIR Chapter 4 addresses impacts on land use; visual resources; socioeconomics; public services; cultural resources; biological resources; water resources; geology and soils; transportation, traffic, and circulation; air quality; noise; utilities; and hazardous materials and waste for each alternative. These analyses conclude that, with mitigation, there would be no significant impacts, except for one unmitigable land use impact. There would be no disproportionate or other impact on minority or low-income populations, with respect to the land use impact, because it is unlikely that the potential residential population would be disproportionately minority, and no low-income housing has been proposed as part of the project.

## **5.7 PROTECTION OF CHILDREN FROM ENVIRONMENTAL HEALTH RISKS AND SAFETY RISKS**

E.O. 13045, Protection of Children from Environmental Health Risks and Safety Risks, states the following:

"A growing body of scientific knowledge demonstrates that children may suffer disproportionately from environmental health risks and safety risks. These risks arise because: children's neurological, immunological, digestive, and other bodily systems are still developing; children eat more food, drink more fluids, and breathe more air in proportion to their body weights than adults; children's size and weight may diminish their protection from standard safety features; and children's behavior patterns may make them more susceptible to accidents because they are less able to protect themselves."

Each Federal agency must (1) make it a high priority to identify and assess environmental health risks and safety risks that could disproportionately affect children and (2) ensure that its policies, programs, activities, and standards address disproportionate risks to children that result from environmental health risks or safety risks.

279 Under the definitions provided in E.O. 13045, covered regulatory actions include those  
280 that could be "economically significant" (under E.O. 12866) and "concern an  
281 environmental health risk or safety risk that an agency has reason to believe may  
282 disproportionately affect children." Further, E.O. 13045 defines "environmental health  
283 risks and safety risks" [to] "mean risks to health or to safety that are attributable to  
284 products or substances that the child is likely to come in contact with or ingest (such as  
285 the air we breathe, the food we eat, the water we drink or use for recreation, the soil we  
286 live on, and the products we use or are exposed to)."

287 Navy has made it a high priority to identify and assess environmental health risks and  
288 safety risks that could have disproportionately high effects on children.

289 Navy disposal and the No Action Alternative would not result in any children using or  
290 accessing the site. Therefore, no disproportionate effects on children would occur.

291 Under the community reuse alternatives, children would reside at or visit the site. The  
292 largest concentration of children would be present in the residential areas under  
293 Alternative 1 and the recreational areas under Alternatives 2 and 3. As discussed in  
294 Section 3.1.2, NFD Point Molate is within the "toxic or flammable endpoints" for  
295 accidental releases by Chevron Refinery and General Chemical Corporation under a  
296 Worst Case Scenario and an Alternative Release Scenario (Section 3.1), as assessed in  
297 conformance with the Risk Management Program Rule (40 C.F.R. 68.130; Section 112(r)  
298 of the Clean Air Act). Since children are less able to metabolize, detoxify, and excrete  
299 some toxic substances than adults (U.S. EPA 1998), in the event of an accidental release  
300 of substantial quantities of toxic contaminants, there could be disproportionate health  
301 and safety risks to children at NFD Point Molate. These risks would be greatest under  
302 Alternative 1 because residential development is proposed.

303

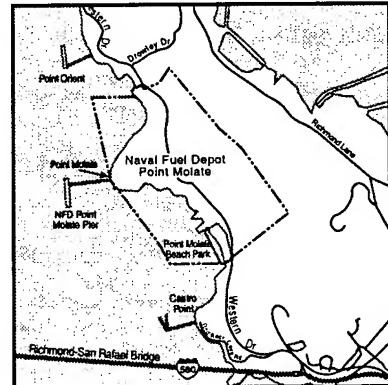
304

305

*This page intentionally left blank.*

---

## 6 Consultation and Coordination



---

## CHAPTER 6: CONSULTATION AND COORDINATION

---

### CONTENTS

Page

---

6.1	Scoping .....	6-1
6.2	Points of Contact .....	6-1
6.3	Personal Communications .....	6-2
6.4	List of Preparers.....	6-3
6.5	Distribution List .....	6-5

## 6. CONSULTATION AND COORDINATION

The following parties were contacted in the course of preparing this Environmental Impact Statement/Environmental Impact Report.

### 6.1 SCOPING

The following interested parties identified issues and areas of concern during the scoping period:

- California State Lands Commission
- California Department of Transportation
- East Bay Regional Park District
- Point Richmond Neighborhood Council
- Sierra Club
- Ms. Barbara Strauss
- Chevron
- Orchidnet

### 6.2 POINTS OF CONTACT

#### *U.S. Navy*

Southwest Division  
Naval Facilities Engineering Command  
1230 Columbia Street, Suite 100  
San Diego, CA 92101  
Attn: Mr. Robert Montana  
Phone: (619) 532-0942  
Fax: (619) 532-0940

#### *Planning Department, City of Richmond*

2600 Barrett Avenue  
Richmond, CA 94804

#### *Redevelopment Agency, City of Richmond*

Alan Wolken  
Project Manager

Gary Hembree  
Project Manager

32 330 25<sup>th</sup> Street, P.O. Box 4046  
33 Richmond, CA 94804

34 **6.3 PERSONAL COMMUNICATIONS**

35 ***Chevron, USA***  
36 Marielle Boortz

37 ***City of Richmond***

38 **Fire Department**  
39 Richard Giramita  
40 James Lee  
41 Jerry Lindstat  
42 Jerry Pando  
43 Don Perez

44 **Planning Department**

45 Nancy Kaufman  
46 Kent Kitchingman  
47 Larry Sutton

48 **Redevelopment Agency**

49 Rod Jones  
50 Natalia Lawrence  
51 Sunjay Nair

52 **Police Department**

53 Bob Parrick

54 **Municipal Sewer District**

55 Steve Linsley  
56 Ryan Ostler

57 ***Pacific Gas & Electric***

58 Tom Ford

59 ***Port of Richmond***

60 Norman Chan

61 ***Richmond Sanitary Service***

62 Larry Birch

63 ***State Lands Commission***

64 Dave Plummer

**West Contra Costa Unified School District**

Diana Easton

**U.S. Navy, Engineering Field Activity West**

Mark Bonino

Mary Doyle

Doug Pomeroy

Louis Wall

**6.4 LIST OF PREPARERS****U.S. Navy**

Robert Montana

M.S., City Planning, San Diego State University

(Project Manager)

**Uribe & Associates****PROJECT MANAGEMENT**

Stephanie A. Knott, RG, CHG

M.S., Geology, Stanford University

B.S., Geology, Stanford University

(Project Manager)

**TECHNICAL TEAM**

Emily Baker

B.A., Environmental Science, University of California, Berkeley

(Technical Support)

Ed Cheslak, Ph.D.

Ph.D., Aquatic/Systems Ecology, Utah State University

M.S., Biology/Ecology, San Diego State University

B.S., Zoology, San Diego State University

(Biology)

Felicia Dearce

B.S., Environmental Toxicology, University of California, Davis

(Socioeconomics and Population)

Bradley G. Erskine, Ph.D, RG, CEG

Doctorate, Geology, University of California, Berkeley

M.S., Geophysics, California State University, San Diego



- 99 B.S., Geology, University of California, Los Angeles  
100 (Geology, Hazardous Materials, Water Resources)
- 101 Brian Wines  
102 M.S., Chemical Engineering, University of California, Berkeley  
103 B.S., Chemistry, University of Washington  
104 B.S., Chemical Engineering, University of Washington  
105 (Air Quality)
- 106 Cheung Environmental Consulting  
107 Lori Cheung  
108 B.A. Environmental Sciences, University of California, Berkeley  
109 (Public Services, Utilities, Other Considerations, Technical Review)
- 110 Goodavish Environmental Planning and Design  
111 Martha Goodavish, AICP  
112 M.C.R.P., Masters of City and Regional Planning, University of California, Berkeley  
113 B.L.A., Landscape Architecture, University of Oregon, Eugene  
114 (Land Use, Visual Resources, and Traffic, Transportation, & Circulation, Project  
115 Coordination)
- 116 *Grassetti Environmental Consulting*  
117 Richard Grassetti  
118 M.A., Geography, University of Oregon  
119 B.A., Geography, University of California, Berkeley  
120 (NEPA/CEQA Compliance, Cultural Resources, Socioeconomics and Population, Noise,  
121 Air Quality, Other Considerations, Technical Review)
- 122 *Korve Engineering*  
123 Paramsothy Thananjeyan, Ph.D  
124 Ph.D., Civil Engineering, University of California, Berkeley  
125 M.S., Civil Engineering, University of Minnesota  
126 M.S., Computer Science, University of Minnesota  
127 B.T., Civil Engineering, Institute of Technology, Madras, India  
128 (Traffic, Transportation, & Circulation)
- 129 Steve Lowens  
130 M.S., Transportation Engineering, University of California, Berkeley  
131 B.S., Civil Engineering, Purdue University, Indiana  
132 (Traffic, Transportation, & Circulation)

**Pacific Legacy**

John Holson

M.A., Cultural Resources Management, Sonoma State University

B.A., Anthropology, San Francisco State University

B.A., Humanities, San Francisco State University

(Cultural Resources)

Janet Eidsness

M.A., Cultural Resources Management, Sonoma State University

B.A., Anthropology, Colorado State University

(Cultural Resources)

**6.5 DISTRIBUTION LIST**

The project mailing list is used by the Navy and the City of Richmond to notify interested members of the public of the major milestones associated with the reuse of NFD Point Molate. The agencies, organizations, and individuals on the mailing list are presented below.

Organization/Name	Office/Branch	Contact
<b>Federal Agencies</b>		
Advisory Council on Historic Preservation	Western Division, Project Review	Ms. Lee Keatinge
Federal Aviation Administration		
General Services Administration	Office of Real Estate Sales	Diane Cah
General Services Administration--Region 9	Property Disposal Division (9PR)	Tom Doszkocs
National Marine Fisheries Services		
National Oceanic & Atmospheric Administration	c/o U.S. EPA Region IX (H-1-2)	Laurie Sullivan
U. S. Fish & Wildlife Service	Division of Ecological Services	
U.S. Army Corps of Engineers	San Francisco District, Regulatory Branch (CESPN-CO-R)	Chief Calvin Fong
U.S. Army Corps of Engineers	Sacramento District	
U.S. Coast Guard	Marine Safety Office, San Francisco Bay	Capt. Harlan Henderson
U.S. Department of the Interior	Office of Environmental Policy and Compliance	Dr. Jon Deason, Director
U.S. EPA Region 9	Office of Federal Activities	Mr. David Marrel
U.S. EPA Region 9	Office of Regional Counsel	
<b>State Agencies</b>		
Base Reuse Task Force	Deputy Director	Ben Williams
California Air Resources Board		Mr. Bob. Fletcher
California Department of Conservation	Division of Mines and Geology	James Davis, Geologist

Organization/Name	Office/Branch	Contact
California Department of Conservation		Environmental Coordinator
California Department of Fish & Game	Region 3, Coastal Region	Susan Ellison
California Department of Health Services	Environmental Management Branch	Darice Bailey
California Department of Health Services	Public Water Supply Branch	
California Department of Transportation	District 4, IGA/CEQA Branch	Phillip Badal, Branch Chief
California Department of Transportation	Office of Transportation Planning	CEQA Review Branch
California Department of Transportation	Richmond-San Rafael Bridge	
California Department of Water Resources		Mr. Walt Pettit
California EPA	Department of Toxic Substances	Daniel E. Murphy
California EPA	Department of Toxic Sub., Planning Section	Gunther W. Moskat
California Highway Patrol	Planning and Analysis Division	
California Native American Heritage Commission	Executive Secretary	Mr. Larry Meyers
California Office of Emergency Services		
California Office of Planning and Research	State Clearinghouse	Antero Rivasplata
California Public Utilities Commission	Safety and Enforcement Division, Railroad Operations Safety Section	Mr. Ernie von Ibsch
California Regional Water Quality Control Board	San Francisco Bay Region	David Leland
California Resources Agency		Mary D. Nichols
California State Coastal Conservancy		Terri Nevins
California State Historic Preservation Office		
California State Lands Commission		Mary Griggs
California Trade and Commerce Agency		Mr. Laurin Severins
California Department of Transportation	Transportation Planning, Branch A	Chief Edwin Erwin
<b>Local and Regional Agencies</b>		
AC Transit		
Association of Bay Area Governments		Susan Ryder
Bay Area Air Quality Management District		Cathrine Fortney
City of El Cerrito	Planning Department	
City of Hercules		Planning Director
City of Pinole		Planning Director

Organization/Name	Office/Branch	Contact
City of San Pablo	Planning Department	
Contra Costa County Flood Control District		Director
Contra Costa County Flood Control District		Allan Finlay
Contra Costa County Haz. Mat/Occupational Health		
Contra Costa County Health Department	Environmental Division	
Contra Costa County Public Works Department	Land Development Divisions	
Contra Costa County Public Works Department	Road Engineering Division	
Contra Costa Health Services Department		William Walker, M.D., Director
Contra Costa Transportation Authority		Irma Anderson, WCCTAC
Contra Costa Transportation Authority		Robert McCleary
East Bay Regional Parks District		Brian Wiese
East Bay Regional Parks District		Director
East Bay Municipal Utility District		
Metropolitan Transportation Commission		Chris Bittle
Metropolitan Transportation Commission	Metro Center	
Recreation & Parks Commission		Cheryl Collier
San Francisco Bay Conservation and Development Commission		Joe LaClair
Town of Danville	SWAT (Southwest County)	Brian Welch
West Contra Costa Transportation Advisory Council		Lisa Hogeboom
West Contra Costa Unified School District		Cate Burkhart
West Contra Costa Unified School District		Director of Planning
Contra Costa County Board of Supervisors		
<b>Elected Officials</b>		
The Honorable Barbara Boxer	U.S. Senator	
The Honorable Diane Feinstein	U.S. Senator	
The Honorable George Miller	U.S. Representative, 7th District	
The Honorable Don Perata	State Senator, 9th District	
The Honorable Dion Aroner	State Assemblywoman, 14th District	

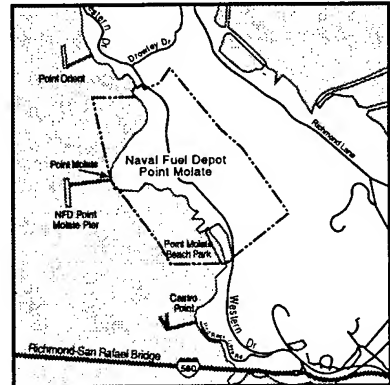
Organization/Name	Office/Branch	Contact
<b>City of Richmond</b>		
Mayor Rosemary Corbin	City of Richmond, Office of the Mayor	
Irma L. Anderson	Vice Mayor, City of Richmond	
John E. Marquez	Richmond City Council Member	
Nathaniel Bates	Richmond City Council Member	
Thomas K. Butt	Richmond City Council Member	
Alexander P. Evans	Richmond City Council Member	
Richard L. Griffin	Richmond City Council Member	
Donna R. Powers	Richmond City Council Member	
Isiah Turner	Richmond City Manager	
Design Review Board		
Environmental Assessment Panel		
Richmond Fire Department		Chief Alford Nero
Richmond Municipal Sewer District		
Richmond Parks and Landscaping		Tony Norris
Richmond Planning Commission		
Richmond Planning Department		Daniel Shaw, Community Development and Planning Services Director
Richmond Planning Department		Nancy Kaufman, Principal Planner
Richmond Planning Department		Kent Kitchingman, Brownfields Coordinator
Richmond Police Department		Captain Bob Becker
Richmond Redevelopment Agency		David Thompson, Director
Richmond Redevelopment Agency		Alan Wolken, Project Manager
Richmond Redevelopment Agency		Sunjay Nair, Associate Administrative Analyst
TRANSPAC (Central County)		Barbara Neustadter
TRANSPAN (East County)		Patrick Roche
TVTC (Tri-Valley Technique)		Bill van Gelder
<b>Libraries</b>		
California Historical Resources Information Systems	Northwest Information Center	Leigh Jordan, Sonoma St. Univ.
Colorado State University Library		Fred Schmidt
Defense Technical Information Center	DTIC Customer Service Help Desk (DTIC-BLS)	
Point Richmond Public Library		
Richmond Public Library		
<b>Interested Persons</b>		
Nicholas Agbabiaka		
Dave Dolberg		
Stan Ellexson		

Organization/Name	Office/Branch	Contact
Donald Hardison		
Ralph Hill		
Bill Hunter	Collette & Erickson LLP	
Reverend Philip Lawson		
Shawn Matson		
Don T. Ryder		
Wayne Scholl		
Jean Siri		
<b>Interested Groups and Organizations</b>		
ARC Ecology		Saul Bloom
Bay Institute of San Francisco		
California Environmental Trust		
California Native Plant Society	East Bay Chapter	Ms. Dianne Lake
California Native Plant Society	Yerba Buena Chapter	Jake Sigg
Central Engineering, Inc.		Paul C. Coltow
Central Labor Council		Don Gosney
Chevron Products Company		W. D. Steelman, General Manager
Consortium of United Indian Nations		
Council of Industries	Executive Director	Dennis Spaniol
East Bay Coalition for a Demilitarized Bay		Lillian Nurmela
Environmental Audit		Ms. Larketter Lein
Environmental Defense Fund	Rockridge Market Mall	David Roe
Golden Gate Audobon Society		Arthur Feinstein
Greenpeace		Lillian Nurmela
Groundwork Institute		Huck Rorick
In Side Public Relations		Nathaniel R. Bates
International Indian Treaty Council		
League of Women Voters		Barbara Vincent
League of Women Voters		Lucretia Edwards
Metro Center		Chris Brittle
Muwekma Indian Tribe		Chairperson Rosemary Cambra
Office of Small Business Development	Material Management	Glenda Jo Smith
Orchidnet		Jonathan Driller
Pacific Gas & Electric Company		Will Hardee
Point Reyes Bird Observatory		
Point Richmond Neighborhood Council		David MacDairmid
Pt. San Pablo Yacht Harbor Neighborhood Council		George Ann Muntin
Restoring the Bay Campaign		Marc Holmes
Richmond Chamber of Commerce		Bargara Obele

Organization/Name	Office/Branch	Contact
Save San Francisco Bay Association		
Save the Bay		Cynthia Patton
Sierra Club	West County Regional Group	Debbi Landshoff, Chair
Trust for Public Lands		Tim Wirth
United Anglers		
West County Toxics Coalition		Lucille Allen
<b>Media</b>		
Oakland Tribune		
The Channel		Deirdre Cerkanowicz
West County Times		
The Alameda Publishing Company	Richmond Post	

---

## 7 References





---

## CHAPTER 7: REFERENCES

### CONTENTS

---

Page

7	REFERENCES.....	7-1
---	-----------------	-----

## 7. REFERENCES

- Allied Technology Group. 1999. *Draft Contamination Removal Summary Report: PCB Devices Cleanup, Point Molate Naval Fuel Depot, Richmond, California*. July 1999.
- American Industrial Hygiene Association (AIHA), Emergency Response Planning Guidelines for Ammonia, 1988.
- Association of Bay Area Governments (ABAG). 1997. *Projections '98*. December 1997.
- \_\_\_\_\_. 1998. San Francisco Bay Trail—Map 6, Upper East Bay.  
<http://www.abag.ca.gov/bayarea/baytrail/maps/map6d.gif>.
- \_\_\_\_\_. 2000. Table 2: City/County Population and Housing Estimates, January 1, 1998. [www.abag.ca.gov/abag/overview/datacenter/popdemo/sfe-5.xls](http://www.abag.ca.gov/abag/overview/datacenter/popdemo/sfe-5.xls).
- Bay Area Air Quality Management District. 1997a. *BAAQMD, Public Information and Education Division, Press Release, December 11, 1997*.
- \_\_\_\_\_. 1997b. Bay Area 1997 Clean Air Plan and Triennial Assessment. December 17, 1997.
- \_\_\_\_\_. 1998a. *BAAQMD, Public Information and Education Division, Press Release, June 25, 1998*.
- \_\_\_\_\_. 1998b. Enforcement Division. Obtained from BAAQMD Enforcement Division, Public Records.
- \_\_\_\_\_. 1998c. Notice of Violations Database, obtained from BAAQMD Administration Division, Public Records, December 1998.
- \_\_\_\_\_. 1999a. Notice of Violation Database and Complaint History, obtained from BAAQMD Administration Division, Public Records, May 1998 through July 27, 1999.
- \_\_\_\_\_. 1999b. *CEQA Guidelines: Assessing the Air Quality Impacts of Projects and Plans*. December 1999.
- \_\_\_\_\_. 1999c. Unpublished wind speed and direction data, "Point San Pablo frequency distribution," for December 1, 1989 through November 30, 1999.
- \_\_\_\_\_. 2000a. Henry Hilken, Senior Environmental Planner, BAAQMD. Personal communication with Brian Wines, Uribe & Associates. January 18, 2000.

- 32 \_\_\_\_\_ . 2000b. Notice of Violation Database and Complaint History obtained  
33 from BAAQMD Administrative Division, Public Records, July 1, 1999  
34 through April 30, 2000.
- 35 Bay Conservation and Development Commission (BCDC). 1998. *San Francisco Bay*  
36 *Plan*. San Francisco, California. January 1969, revised 1998.
- 37 Beardsley, R.K. 1954. *Temporal and Area Relationships in Central California*  
38 *Archaeology*. University of California Archaeological Survey Reports, 24 and  
39 25. Berkeley.
- 40 California Air Resources Board (CARB). 1990-1997. *California Air Quality Data,*  
41 *Volumes XXII - XXVI (Annual Summaries)*. Aerometric Data Division.  
42 Sacramento, California.
- 43 \_\_\_\_\_ . 1991. ARB Fact Sheet 39, Ambient Air Quality Standards.
- 44 \_\_\_\_\_ . 1999. Air Quality Data Statistics. <http://www.arb.ca.gov/adam>.
- 45 California Employment Development Department, 2000. Labor Market Information  
46 Division, Information Services Group. [http://www.calmig.cahwnet](http://www.calmig.cahwnet.gov/file/DEMO&E/richmondCity5.htm)  
47 [gov/file DEMO&E/richmondCity5.htm](http://www.calmig.cahwnet.gov/file/DEMO&E/richmondCity5.htm).
- 48 California Department of Finance. 1998. *City/County Population Estimates, with*  
49 *Annual Percentage Change, January 1, 1997 and 1998*. Sacramento, California.  
50 May 1998.
- 51 \_\_\_\_\_ . 2000. Contra Costa County Socioeconomic Data and California and U.S.  
52 Unemployment Rates from <http://www.dof.ca.gov>. June 2000.
- 53 California Department of Fish and Game (CDFG). 1989. *Fish Species of Special*  
54 *Concern in California*. October 1989.
- 55 \_\_\_\_\_ . 1994a. *Special Animals List*. National Heritage Division, National Diversity Data  
56 *Base*. August 1994.
- 57 \_\_\_\_\_ . 1994b. *Endangered, Threatened, and Rare Plants of California*. Natural Heritage  
58 *Division, Endangered Plant Program*. November 1994.
- 59 \_\_\_\_\_ . 1994c. *Special Plants List*. National Heritage Division, National Diversity Data  
60 *Base*. November 1994.
- 61 \_\_\_\_\_ . 1995a. *California Natural Diversity Data Base*. Natural Heritage Division.
- 62 \_\_\_\_\_ . 1995b. *Endangered and Threatened Animals of California*. Natural Heritage  
63 *Division*. January 1995.

- 64 California Department of Parks and Recreation. 1976. *California Inventory of*  
65 *Historical Resources*.
- 66 California Division of Mines and Geology (CDMG) 1973. *Geological and Geophysical*  
67 *Investigation for Tri-Cities Seismic Safety and Environmental Resource Study,*  
68 *Report No. 19.*
- 69 Carlisle and Rollins. 1994. "Ground Response Studies at Alameda Naval Air  
70 Station", In : Borchardt, R.D., 9<sup>th</sup> ed), *The Loma Prieta Earthquake of October 17,*  
71 *1989 - Strong Ground Motion*, U.S. Geological Survey Professional Paper 1551-  
72 A.
- 73 Chavez, D. 1981. *Cultural Resources Assessment for Replacement of Water Distribution*  
74 *System, Point Molate, Richmond, California.* Prepared by David Chavez,  
75 Consulting Archaeologist for VHS Associates, Inc. On file at NWIC (S-6880).
- 76 Chavez, D. and Holson, J. 1985. *Cultural/Archaeological Resources Investigation at the*  
77 *Naval Supply Center Fuel Department, Point Molate, Contra Costa County,*  
78 *California.* Prepared by David Chavez, Consulting Archaeologist for Navy  
79 Public Works Center, San Francisco Bay, Oakland Army Base. On file at  
80 NWIC (S-7186). January, 1985.
- 81 Chevron U.S.A. Inc. 1999a. Marielle Boortz, Richmond, CA. Communication via  
82 telephone with Martha Goodavish, Goodavish Environmental Planning and  
83 Design. April 20, 1999.
- 84 Chevron U.S.A. Inc. 1999b. Fact sheet, Richmond Refinery. Distributed at the May  
85 12, 1999 Public Meeting Held by Contra Costa Health Services, Hazardous  
86 Materials Program.
- 87 City of Richmond. 1994a. *Volume One of the Richmond General Plan.* August 1994,  
88 revised November 1996.
- 89 \_\_\_\_\_. 1994b. *Volume Two of the Richmond General Plan: Technical Appendix.*  
90 August 1994, revised May 1996.
- 91 \_\_\_\_\_. 1997a. *Draft Point Molate Reuse Plan.* City of Richmond, California. Adopted  
92 March 1997.
- 93 \_\_\_\_\_. 1997b. *Zoning Ordinance.* City of Richmond, California.
- 94 \_\_\_\_\_. 1998a. *Richmond Economy, 1995 Report / 1996 Outlook.* March 1998.
- 95 \_\_\_\_\_. 1998b. Rosemary M. Corbin, Mayor of City of Richmond. Letter to Hon.  
96 George Miller, US House of Representatives, Washington, requesting  
97 assistance in obtaining Congressional approval to reduce the size of the  
98 Winehaven Historic District at Point Molate.

- 99            \_\_\_\_\_. 1998c. Richard Giramita, Deputy Fire Chief, City of Richmond Fire  
100            Department. Communication via telephone with Emily Baker, Uribe &  
101            Associates. August 26, 1998.
- 102            \_\_\_\_\_. 1998d. Jerry Lindstat, City of Richmond Fire Department. Communication  
103            via telephone with Doug Sheeks, Uribe & Associates.
- 104            \_\_\_\_\_. 1998e. Jerry Pando, City of Richmond Fire Department. Communication via  
105            telephone with Kristina Wood, Uribe & Associates. August 26 and 27, 1998.
- 106            \_\_\_\_\_. 1998f. Don Perez, Inspector, City of Richmond Fire Department.  
107            Communication via telephone with Emily Baker, Uribe & Associates. August  
108            26, 1998.
- 109            \_\_\_\_\_. 1998g. Bob Parrick, Lieutenant, City of Richmond Police Department.  
110            Communication via telephone with Lori Cheung, Cheung Environmental  
111            Consulting. December 8, 1998.
- 112            \_\_\_\_\_. 1999a. Nancy Kaufman, Acting Planning Director of City of Richmond.  
113            Comment made in April 30, 1999 meeting with Navy and City of Richmond.  
114            April 30, 1999.
- 115            \_\_\_\_\_. 1999b. James Lee, Inspector, City of Richmond Fire Department.  
116            Communication via telephone with Lori Cheung, Cheung Environmental  
117            Consulting. May 28, 1999.
- 118            City of Richmond and Bay Area Defense Conversation Action Team. *Utility Study,*  
119            *Master Utility Plan, Capital Improvement Plan, Point Molate, California.*  
120            Prepared by Harding Lawson Associates, Manna Consultants, OGISO  
121            Environmental, Manna Consultants, Vali Cooper & Associates, Inc. and  
122            Geotopo. February, 1999.
- 123            Contra Costa Health Services. 2000. Letter to Gary Hembree, Development Project  
124            Manager, Richmond Redevelopment Agency, from Lewis Pascalli, Jr. Esq.,  
125            Director, Hazardous Materials Programs. May 11, 2000.
- 126            Contra Costa Transportation Authority. 1997. *Growth Management Program.*  
127            September 17, 1997.
- 128            Council on Environmental Quality (CEQ). 1997. Environmental Justice, Guidance  
129            under the National Environmental Policy Act. December 10, 1997.
- 130            Driver, H.E., and A.E. Treganza. n.d. *Unpublished fieldnotes on archaeological*  
131            *excavations in 1939 at CA-CCO-283, Point Molate.* On file at the Archaeological  
132            Research Facility, University of California, Berkeley (Manuscript 332).

- 133 Edwards, L. 1976. *National Register of Historic Places Inventory--Nomination Form,*  
134 *Winehaven (CA-CCO-422H).* Prepared by Winehaven Historical Study  
135 Committee, Oakland.
- 136 Garcia, A.W., and J. R. Houston. 1975. Type 16 Flood Insurance Study: Tsunami  
137 Predictions for Monterey and San Francisco Bays and Puget Sound.  
138 Technical Report H-75-17. Prepared for the Federal Insurance  
139 Administration, Department of Housing and Urban Development, by the  
140 Hydraulics Laboratory, U.S. Army Engineer Waterways Experiment Station.  
141 Vicksburg, Virginia.
- 142 General Chemical. 1999. Fact Sheet, Who Are We? Distributed at the May 12, 1999  
143 Public Meeting held by Contra Costa Health Services, Hazardous Materials  
144 Program.
- 145 Harris, Cyril, Editor. 1979. *Handbook of Noise Control.* McGraw-Hill Book Co.
- 146 International Conference of Building Officials. 1997. *Uniform Building Code.*  
147 Whittier, CA.
- 148 Institute of Transportation Studies (ITS). 1997. *Transportation Project-Level Carbon*  
149 *Monoxide Protocol.* Prepared by Vicente J. Garza, Peter Graney and Daniel  
150 Sperling; prepared for Environmental Program, California Dept. of  
151 Transportation. Institute of Transportation Studies, University of California,  
152 Davis.
- 153 Institute of Transportation Engineers (ITE). 1998. Trip Generation Manual, 5<sup>th</sup>  
154 Edition.
- 155 Lake, D. 1995. *Unusual and Significant Plants of Alameda and Contra Costa Counties.*  
156 Fourth Edition. California Native Plant Society, East Bay Chapter. March 1.
- 157 \_\_\_\_\_. 1996. *Botanical Evaluation of Pt. Molate.* Rare Plant Committee, East Bay  
158 Chapter, California Native Plant Society. June 5.
- 159 Lee, C.H., and Praszker. 1969. *Bay Mud Developments and Related Structural*  
160 *Foundations.* In Goldman, H.B., (ed): Geological and Engineering Aspects of  
161 San Francisco Bay Fill. California Division of Mines and Geology Special  
162 Report 97.
- 163 Metropolitan Transportation Commission. 1998. *Draft 1998 Regional Transportation*  
164 *Plan for the San Francisco Bay Area.* August 1998.
- 165 National Park Service. no date. HABS No. CA-2658, *Photographs, Written Historical*  
166 *and Descriptive Data for Winehaven, Point Molate Naval Fuel Depot, Richmond,*  
167 *Contra Costa County, California.* On file at NPS, San Francisco.

- 168 \_\_\_\_\_ . 1998. Letter dated October 28, 1998 to Rosemary M. Corbin, Mayor, City of  
169 Richmond. Carol D. Shull, Keeper of the National Register of Historic Places,  
170 National Register, History and Education. October 28, 1998.
- 171 National Register of Historic Places (National Register). 1978. *Copy of Congressional*  
172 *Notification for Entries in the National Register, for State of California: Winehaven,*  
173 *Richmond, Contra Costa County, entered October 2, 1978. File copy received at*  
174 *California Office of Historic Preservation on October 16, 1978.*
- 175 Nature Conservancy. 1994. *Endangered, Threatened, and Candidate Species on Navy*  
176 *and Marine Corps Lands: A Base Specific Handbook for Point Molate.* January  
177 1994.
- 178 Naval Energy and Environmental Support Activity (NEESA). 1988. *Preliminary*  
179 *Assessment Report, Point Molate Fuel Depot, Western Drive, Richmond, California.*  
180 April, 1988. NEESA 13-159PA.
- 181 \_\_\_\_\_ . 1992. *Spill Prevention, Control and Countermeasures Plan.* April, 1992.
- 182 Nelson, N. 1909. *Shellmounds of the San Francisco Bay Region.* University of  
183 California Publications in American Archaeology and Ethnology. Vol. 7, No.  
184 4, pages 309-356, University of California, Berkeley.
- 185 Pacific Gas & Electric Company. 1998. Tom Ford, Industrial Power Engineer,  
186 Pacific Gas & Electric. Communication via telephone with Lori Cheung,  
187 Cheung Environmental Consulting. November 24, 1998.
- 188 Pacific Aerial Surveys. 1996. Aerial Photograph of NFD Point Molate and Vicinity.
- 189 Perkins, J.B., and J. Boatwright. 1995. *On Shaky Ground: Association of Bay Area*  
190 *Governments, Publ. No. P95001EQK.* Oakland, California. 1995.
- 191 Port of Richmond. 1999. Norman Chan. Port of Richmond, Richmond, California.  
192 Communication via telephone with Martha Goodavish, Goodavish  
193 Environmental Planning and Design. May 11, 1999.
- 194 Praetzellis, A. 1980. *Historic Archaeological Site/Feature Survey Record for CA-CCO-*  
195 *422H (Winehaven).* On file at NWIC.
- 196 Public Works Center, San Francisco. 1995. *PWC List of Oil Filled Electrical Equipment*  
197 *for NSCO Fuel Depot Point Molate.* As cited in U.S. Navy 1996a.
- 198 Regional Water Quality Control Board (RWQCB). 1995. *Water Quality Control Plan*  
199 *for the San Francisco Bay Basin.*

- 200 Richmond Sanitary Service. 2000. Larry Birch, Director of Environmental  
201 Management, Richmond Sanitary Service. Communication via telephone  
202 with Lori Cheung, Cheung Environmental Consulting. May 18, 2000.
- 203 Richmond Municipal Sewer District. 1998a. Steve Linsley, Laboratory Supervisor,  
204 Richmond Municipal Sewer District. Communication via telephone with  
205 Lori Cheung, Cheung Environmental Consulting. December 17, 1998.
- 206 Richmond Municipal Sewer District. 1998b. Ryan Ostler, Laboratory Supervisor,  
207 Richmond Municipal Sewer District. Communication via telephone with  
208 Lori Cheung, Cheung Environmental Consulting. December 17, 1998.
- 209 Rippey, D.A., and A. Praetzellis. 1980. *An Archaeological Survey of an Approximately*  
210 *10-Acre Parcel Located at the Naval Fuel Supply Depot, Pt. Molate, Contra Costa*  
211 *County, California*. Prepared by the Cultural Resources Facility, Sonoma State  
212 University. On file at NWIC (S-2146).
- 213 Roscoe, J.M. 1980. *An Archaeological Survey of an Approximately 1-Acre Parcel Located*  
214 *at the Naval Fuel Supply Depot, Pt. Molate, Contra Costa County, California*.  
215 Prepared by the Cultural Resources Facility, Sonoma State University. On  
216 file at NWIC (S-2357).
- 217 Sales Marketing and Management. 1995. *The 1995 Survey of Buyer Power*.
- 218 State Historic Preservation Officer (SHPO). 1996a. Letter dated May 8, 1996 (file no.  
219 USN940519A) to Louis S. Wall, Environmental Planning Branch, Department  
220 of the Navy, Naval Facilities Engineering Command, San Bruno, from  
221 Cherilyn Widdell, SHPO, concurring with proposed boundary revision of  
222 Winehaven Historic District (references review of JRP 1996 report).
- 223 \_\_\_\_\_. 1996b. Letter dated September 27, 1996 (file no USN960916A) to Louis S.  
224 Wall, Environmental Planning Branch, Department of the Navy, Naval  
225 Facilities Engineering Command, San Bruno, from Cherilyn Widdell, SHPO,  
226 concurring with Navy's National Register eligibility determinations and  
227 requesting further information about the Chinese Shrimp Camp site.
- 228 State Lands Commission (SLC). 1998. Dave Plummer, Public Land Manager, State  
229 Lands Commission, Sacramento, CA. Communication via telephone with  
230 Martha Goodavish, Goodavish Environmental Planning and Design.  
231 December 11 and 16, 1998.
- 232 U.S. Army Corps of Engineers (U.S. ACE). 1984. *San Francisco Bay Tidal Stage Versus*  
233 *Frequency Study*. San Francisco District. October 1984.
- 234 U.S. Census. 1990. *United States Census of Population and Housing*, Census Bureau,  
235 Department of Commerce, Washington D.C.



- 236 U.S. Department of Defense. 1995. Working Draft Strategy on Environmental  
237 Justice.
- 238 U.S. Department of the Interior, National Park Service. 1992. *Secretary of the*  
239 *Interior's Standards for Rehabilitation and Guidelines for Rehabilitating Historic*  
240 *Buildings*.
- 241 U.S. Environmental Protection Agency. 1971. Gharabegian, et al. 1985. Acoustical  
242 Society of America, 1978.
- 243 \_\_\_\_\_. 1995. *The Probability of Sea Level Rise*. Office of Policy, Planning, and  
244 Evaluation. October 1995.
- 245 \_\_\_\_\_. 1998. *The EPA's Children's Environmental Health Yearbook*. Section cited:  
246 Introduction, Special Vulnerabilities.
- 247 \_\_\_\_\_. 1999. Press Release, "Statement of the U.S. Environmental Protection Agency  
248 on Court Decision on Clean Air Rules", Washington D.C., May 14, 1999.
- 249 U.S. Fish and Wildlife Service (USFWS). 1993. *Plant Taxa for Listing as Endangered or*  
250 *Threatened Species; Notice of Review*. 50 CFR Part 17. November 22, 1993.
- 251 \_\_\_\_\_. 1994a. *Notice of Proposed Endangered Status for Suisun Thistle and Soft Bird's-*  
252 *Beak from Tidal Marshes in the San Francisco Bay Area of Northern California*.  
253 June 16, 1994.
- 254 \_\_\_\_\_. 1994b. *Endangered and Threatened Wildlife and Plants*. 50 CFR. 11 & 17. 12.  
255 August 20, 1994.
- 256 \_\_\_\_\_. 1995a. *Species List for the Fleet and Industrial Supply Center Fuel Department*  
257 *Point Molate Site in Richmond, Contra Costa County, California*. March 20, 1995.
- 258 \_\_\_\_\_. 1995b. *Endangered and Threatened Wildlife and Plants; Animal Candidate Review*  
259 *for Listing as Endangered or Threatened Species; Proposed Rule*. 50 CFR Part 17.  
260 November 15, 1995.
- 261 U.S. Geologic Survey (USGS). 1993a. 7.5-minute Series (Topographic): San Quentin  
262 Quadrangle, California
- 263 \_\_\_\_\_. 1993b. Richmond, California, United States. Created from digital  
264 orthophoto quadrangles. July 10, 1993.  
265 [http://terraserver.microsoft.com/GetTilesByXY.asp?XId=5427&YId=3499&](http://terraserver.microsoft.com/GetTilesByXY.asp?XId=5427&YId=3499&TileX=1&TileY=5&SrcId=1&ImgDate=07/10/1993&ImgSize=0&DSize=2)  
266 [TileX=1&TileY=5&SrcId=1&ImgDate=07/10/1993&ImgSize=0&DSize=2](http://terraserver.microsoft.com/GetTilesByXY.asp?XId=5427&YId=3499&TileX=1&TileY=5&SrcId=1&ImgDate=07/10/1993&ImgSize=0&DSize=2).
- 267 \_\_\_\_\_. 1999. *Earthquake Probabilities in the San Francisco Bay Region: 2000 to 2030 – A*  
268 *Summary of Findings*. USGS Open File Report 99-517.

- 269 U.S. Navy. 1987. *Natural Resources Management Plan, Point Molate Fuel Supply Depot.*  
270 Prepared by LSA Associates. October 1987.
- 271 \_\_\_\_\_. 1988. *Master Plan for Naval Supply Center, Oakland, California.* January 1988.
- 272 \_\_\_\_\_. 1990. *Shallow Soil Investigation at NFD Point Molate.* Prepared by ERM-West.
- 273 \_\_\_\_\_. 1992a. *Stormwater Pollution Prevention Plan, Naval Supply Center Oakland,*  
274 *Naval Fuel Depot Point Molate, Richmond, California.*
- 275 \_\_\_\_\_. 1992b. *Site Inspection, Final Summary Report. NFD Point Molate.* PRC,  
276 Denver, Colorado. Prepared by PRC Environmental Management Inc.  
277 August 26, 1992.
- 278 \_\_\_\_\_. 1994a. *Endangered, Threatened, and Candidate Species on Navy and Marine Corps*  
279 *Lands: A Base Specific Handbook for Point Molate.* January 1994.
- 280 \_\_\_\_\_. 1994b. *Naval Fuel Depot Point Molate. March 1994 Quarterly Report.* Prepared  
281 by PRC Environmental Management Inc. June 24, 1994.
- 282 \_\_\_\_\_. 1994c. *Naval Fuel Depot Point Molate June 1994 Quarterly Report.* Prepared by  
283 PRC Environmental Management Inc. September 27, 1994.
- 284 \_\_\_\_\_. 1994d. *Naval Fuel Depot Point Molate California Waste Disposal Area Draft*  
285 *Phase 1 RI Report.* Prepared by PRC Environmental Management Inc.  
286 October 7, 1994.
- 287 \_\_\_\_\_. 1994e. *Naval Fuel Depot Point Molate Shoreline Investigation Soil and Phase 1*  
288 *Sediment Data Summary.* Prepared by PRC Environmental Management Inc.  
289 October 7, 1994.
- 290 \_\_\_\_\_. 1995. *Naval Fuel Depot Point Molate December 1994 Quarterly Report.* Prepared  
291 by PRC Environmental Management Inc. March 14, 1995.
- 292 \_\_\_\_\_. 1996a. *Treatment Ponds Area Extraction Trench Performance Evaluation Report.*  
293 *Naval Fuel Depot Point Molate.* Prepared by PRC Environmental Management  
294 Inc. May 3, 1996.
- 295 \_\_\_\_\_. 1996b. Letter dated June 5, 1996 (file nos. 5090.1B, 185LW/EP-989,  
296 USN940519A) to SHPO Cheryl Widel from Louis S. Wall, Cultural  
297 Resources Program Coordinator, Environmental Planning Branch,  
298 Department of the Navy, Engineering Field Activity, West, Naval Facilities  
299 Engineering Command, San Bruno, referencing NPS acceptance of HABS  
300 documentation for Winehaven in NPS letter dated 5/6/96.

- 301        \_\_\_\_\_. 1996c. *Treatment Ponds Area (Site 3) Removal Action, Action Memorandum.*  
302        *Naval Fuel Depot Point Molate.* Prepared by PRC Environmental Management  
303        Inc. June 24, 1996.
- 304        \_\_\_\_\_. 1996d. Letter dated September 11, 1996 (file nos. 5090.1B, 185CJW/EP-1083)  
305        to SHPO Cherilyn Widell from Louis S. Wall, Cultural Resources Program  
306        Coordinator, Environmental Planning Branch, Department of the Navy,  
307        Engineering Field Activity, West, Naval Facilities Engineering Command,  
308        San Bruno.
- 309        \_\_\_\_\_. 1996e. *Final Jurisdictional Wetland Delineation of Fleet Industrial Supply Center,*  
310        *Naval Fuel Depot Point Molate, Richmond, CA.* October 1996.
- 311        \_\_\_\_\_. 1996f. *Base Realignment and Closure Cleanup Plan (BCP) for Naval Fuel Depot*  
312        *Point Molate, Richmond, CA.* November 1, 1996. Prepared by PRC  
313        Environmental Management Inc. and Morrison Knudsen Corporation.
- 314        \_\_\_\_\_. 1996g. Letter dated November 14, 1996 (file nos. 5090.1B, 185CJW/EP-1149,  
315        USN960916A) to SHPO Cherilyn Widell from Louis S. Wall, Cultural  
316        Resources Program Coordinator, Environmental Planning Branch,  
317        Department of the Navy, Engineering Field Activity, West, Naval Facilities  
318        Engineering Command, San Bruno, providing requested trinomial number  
319        and additional information about significance of Chinese Shrimp Camp/CA-  
320        CCO-506H.
- 321        \_\_\_\_\_. 1996h. *Basewide Environmental Baseline Survey, Final Report, Naval Fuel Depot*  
322        *Point Molate.* November 21, 1996.
- 323        \_\_\_\_\_. 1996i. *Lead Action Summary, Naval Supply Depot Fuel Department, Naval Fuel*  
324        *Depot Point Molate.*
- 325        \_\_\_\_\_. 1996j. *Proposed Boundary Revision Winehaven, Richmond, Contra Costa County,*  
326        *California.* Prepared for Engineering Field Activity West, Naval Facilities  
327        Engineering Command, San Bruno by JRP Historical Consulting Services.
- 328        \_\_\_\_\_. 1998a. *Utility Assessment of Naval Supply Center, Fuel Depot, Point Molate,*  
329        *Richmond.* Working Document.
- 330        \_\_\_\_\_. 1998b. *Final Basewide Finding of Suitability to Lease For Naval Fuel Depot Point*  
331        *Molate, Richmond, California.* April 16, 1998.
- 332        \_\_\_\_\_. 1998c. Mark Bonino, Base Conversion Manager for NFD Point Molate, U.S.  
333        Navy. Electronic mail to Mary Doyle, Planner, EFA-West. June 1, 1998.
- 334        \_\_\_\_\_. 1998d. *Point Molate Transportation: Existing Conditions & Potential.* Prepared  
335        by Korve Engineering. July 1998.

- 336 ———. 1998e. *Point Molate Ferry Transportation: Existing Conditions and Potentials*.  
337 Prepared for Korve Engineering. Prepared by Michael Fajans of Korve  
338 Engineering. July 1998.
- 339 ———. 1998f. *Special Status Plant Survey and Habitat Assessment for Navy Fuel Depot*  
340 *Point Molate*. August 1998.
- 341 ———. 1998g. *Characterization of Underground Storage Tanks and Fuel Pipelines Draft*  
342 *Field Workplan, Naval Fuel Depot Point Molate*. August 7, 1998.
- 343 ———. 1998h. Mark Bonino, Base Conversion Manager for NFD Point Molate, U.S.  
344 Navy. Communication via facsimile to Lori Cheung, Cheung Environmental  
345 Consulting. December 7, 1998.
- 346 ———. 1998i. *Field Activity Report, Site 4 Remedial Action, Extraction*  
347 *Trench/Containment Wall Extension, Point Molate Naval Fuel Depot*. Richmond,  
348 California. Prepared by IT Corporation.
- 349 ———. 1999. *Final Phase I Environmental Baseline Survey, Field Sampling Summary*  
350 *Report, NFD Point Molate*. June 10, 1999.
- 351 ———. 2000. *Final Phase II Remedial Investigation Report, Naval Fuel Depot Point*  
352 *Molate, Richmond, California*. Prepared by Tetra Tech EM Inc. June 2, 2000.
- 353 West Contra Costa Unified School District (WCCUSD). 1999. Letter from Diana  
354 Easton, President, Board of Education, to Emily Baker, Uribe & Associates.  
355 January 7, 1999.
- 356 Wickland Pipelines LLC. 1999. Daniel E Hall, Senior Vice President, Wickland  
357 Pipelines, LLC. Sacramento, CA. Letter to Rosemary M. Corbin, Mayor, City  
358 of Richmond. February 5, 1999.
- 359 Wills, C.D., W. Self, and A. Samuelson. 1995. *Evaluation of Eligibility of World War II*  
360 *Buildings for Listing on the National Register of Historic Places, Naval Fuel Depot*  
361 *Point Molate, Contra Costa County, California*. Prepared by William Self  
362 Associates, Orinda.

363

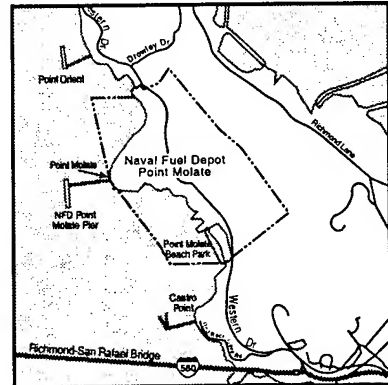
364

*This page intentionally left blank.*

---

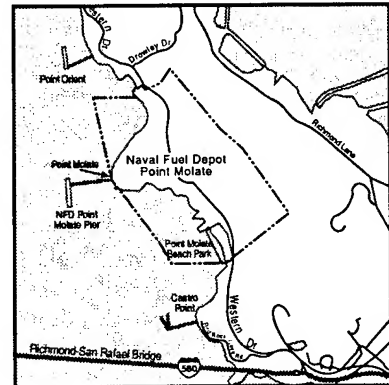
## Appendices

- A Documentation of Homeless Assistance Screening**
- B Public Participation**
- C Excerpt, Point Molate Reuse Plan**
- D Table of Reuse Alternatives**
- E Supporting Technical Information**
- F Restoration Advisory Board and Community Relations Plan Summary**



---

## A Documentation of Homeless Assistance Screening



---

## **APPENDIX A: DOCUMENTATION OF HOMELESS ASSISTANCE SCREENING**

---

### **CONTENTS**

**Page**

#### **Appendix A – Documentation of Homeless Assistance Screening**

Letter of Approval, U.S. Department of Housing and Urban Development .....A-1

Cooperation Agreement between Point Molate Local Reuse Authority and  
the County Homeless Collaborative .....A-2





U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT  
WASHINGTON, D.C. 20410-7000

OFFICE OF THE ASSISTANT SECRETARY FOR  
COMMUNITY PLANNING AND DEVELOPMENT

OCT 7 1998

Honorable Rosemary M. Corbin  
Mayor of Richmond and  
Chair of the Point Molate  
Local Reuse Authority  
2600 Barrett Avenue  
Richmond, CA 94804

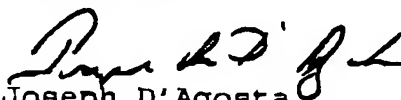
Dear Mayor Corbin:

I am pleased to inform you that the Department of Housing and Urban Development (HUD) has approved your base reuse plan under the Base Closure Community Redevelopment and Homeless Assistance Act for the Point Molate Naval Fuel Depot. This means that you can now move forward with implementing your plan.

Specifically, we have determined that the plan meets the requirements under the Act regarding outreach to homeless assistance providers and balancing the economic redevelopment, other development, and homeless needs of your community. We are pleased that the Point Molate Local Reuse Authority and the Contra Costa County Homeless Collaborative have reached a mutually acceptable arrangement that is reflected in the enclosed legally binding agreement.

Congratulations on your success in balancing the diverse needs of your community. I wish you continued success in implementing your base reuse plan. HUD stands ready to assist you in your revitalization efforts.

Sincerely,

  
Joseph D'Agosta  
Acting General Deputy  
Assistant Secretary

Enclosure

**Cooperation Agreement  
between the Pt. Molate Local Reuse Authority  
and the County Homeless Collaborative**

This agreement is made this 10 day of August, 1998, between the Pt. Molate Local Reuse Authority ("LRA"), and the County Homeless Collaborative (the "Collaborative") for the implementation of the Homeless Assistance Plan that has been adopted as part of the Reuse Plan for the Pt. Molate Refueling Depot.

Whereas, the LRA has been designated by the Department of Defense as the local redevelopment authority for the Pt. Molate Refueling Depot (the "Base") in Richmond, California;

Whereas, the LRA, in cooperation with the City of Richmond (the "City") has prepared a Reuse Plan for the Base which provides for the eventual transfer of the Base to the LRA for the sale or lease of buildings and property to private users; and

Whereas, a Homeless Assistance Plan has been developed through a cooperative effort of the local community and representatives of the homeless community, which balances the needs of the homeless community with the redevelopment of the Base; and

Whereas, representatives of the homeless community were given an opportunity to express interest in reuse of the buildings and property at the Base; and

Whereas, the Collaborative was the only qualified representative of the homeless to express interest in the Base; and

Whereas, the Collaborative does not desire to acquire any of the buildings or property at the Base for use in serving the needs of the homeless community, but does desire the opportunity to link job training, job placement and housing programs for the benefit of the homeless population with employment opportunities that may be created through the redevelopment of the Base;

Now, therefore, the parties agree as follows:

1. Should the LRA or the City select a master developer to develop the Base, the LRA will make a full, good faith effort to maximize partnership opportunities between the Collaborative and such a master developer and will actively encourage the master developer (and any other purchasers or long-term lessees of Base property) to create partnerships with the

Collaborative by requiring any such master developer, purchaser or long-term lessee to meet with the Collaborative to discuss available programs. The Collaborative, including Rubicon and GRIP, will work through the Richmond Works Program to provide a pool of homeless and formerly homeless persons (the "Pool") for job referral to such master developer, purchaser(s) or long-term lessee(s) and the LRA will require, to the extent permitted by law, such master developer, purchaser(s) or long-term lessee(s) to establish a minimum goal of 3% of their total new employees to be selected from the Pool. Further, should the LRA or the City of Richmond own and/or operate businesses at the Base, the LRA will establish a minimum goal of 5% of the workforce to be selected from the Pool.

2. The LRA shall identify 1,000 square feet of warehouse space in West Contra Costa County for use by Shelter, Inc. and the Food Bank. The parties acknowledge and agree that the LRA is not obligated to incur any expense for such warehouse space and that any costs of obtaining or operating such space shall be the sole responsibility of the Collaborative or its members.

3. Should the LRA or the City of Richmond put a contract out for bidding for building and grounds maintenance and landscaping services at the Base, preference will be given to competitive bidders for such contract(s) who include, or are willing to develop, a component for recruiting and training Richmond homeless persons in conjunction with the Richmond Works program; or include an existing program and/or demonstrated track record in hiring and training of homeless persons in their bid proposal. Preference will be given as part of the affirmative action requirements or as a separately scored section of any rating matrix developed to rank said bidders.

4. Should development of the Base include the construction of multi-family residential units, the LRA will require the developer(s) of such housing to provide a minimum of 10% of the units be developed for low-income occupancy, or suitable alternatives devised, in accordance with Richmond General Plan policies and Zoning Ordinance regulations,

IN WITNESS WHEREOF, and intending to be legally bound hereby, the parties have executed this Agreement by their duly authorized officers as of the day and year first above written.

Pt. Molate Local Reuse Authority

By Rosemary M. Corbin  
ROSEMARY M. CORBIN, Chair

Attest:

Eula M. Barnes  
Eula M. Barnes, Clerk

c:\hr\m\lra\homeless 12 (July 13, 1998)

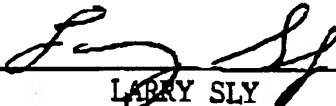
County Homeless Collaborative

By Brenda Blasingame  
BRENDA BLASINGAME, M.A.

Attest:


Homeless Program Services Director  
Contra Costa County

County Homeless Collaborative

By   
LARRY SLY  
Attest: Executive Director  
Contra Costa Food Bank

---

County Homeless Collaborative

By   
M.E. WEDEPOHL, JR.  
Attest: Executive Director  
Shelter, Inc.

---

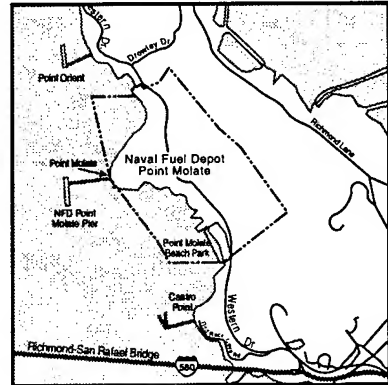
County Homeless Collaborative

By \_\_\_\_\_  
Attest: \_\_\_\_\_

---

---

## B Public Participation



---

## **APPENDIX B: PUBLIC PARTICIPATION**

### **CONTENTS**

---

**Page**

#### **Appendix B – Public Participation**

October 1997 Information Sheet from Public Scoping Meeting.....	B-1
Notice of Intent–Federal Register, September 15, 1997 .....	B-3
Public Notice–Public Scoping Meeting, September 16, 1997 .....	B-5
List of Attendees–Public Scoping Hearing, October 1, 1997 .....	B-8
Letters Received During Public Scoping Period .....	B-9

# ENVIRONMENTAL IMPACT STATEMENT/ENVIRONMENTAL IMPACT REPORT FOR DISPOSAL AND REUSE OF FLEET INDUSTRIAL SUPPLY, NAVAL FUEL DEPOT POINT MOLATE, RICHMOND, CALIFORNIA

## INFORMATION SHEET

October 1997

This fact sheet is being distributed to inform agencies, organizations, and individuals of this project. The Navy and City of Richmond are preparing a Joint Environmental Impact Statement/Environmental Impact Report (EIS/EIR) for the disposal and reuse of Naval Fuel Depot Point Molate.

### ANTICIPATED EIS/EIR SCHEDULE

September 1997	Scoping letters sent to concerned agencies, organizations, and individuals. This officially began the public participation process.
October 1997	Public Scoping Meeting
June 1998	Draft EIS/EIR available to the public for comments
July 1998	Public comment period ends
November 1998	Final EIS/EIR available to the public for comments
December 1998	30-day "No Action" period ends
January 1999	Record of Decision

***For further information  
contact:***

Noreen Roster, Project Manager  
Engineering Field Activity West  
Naval Facilities Engineering Command  
900 Commodore Drive  
San Bruno, CA 946066  
(415) 244-3021

## **I. LOCATION AND DESCRIPTION OF NAVAL FUEL DEPOT PT. MOLATE**

Naval Fuel Depot (NFD) Pt. Molate, is within the jurisdiction of the City of Richmond and consists of 419 acres of land on the northeast shoreline of San Pablo Bay. The property includes several large underground storage tanks, the Winehaven historic district listed on the National Register of Historic Places, and administration and support buildings.

## **II. NAVAL FUEL DEPOT PT. MOLATE REUSE PLAN**

The City of Richmond Blue Ribbon Advisory Committee developed the Point Molate Reuse Plan which identifies a mixture of land-uses, and served as a guide to develop the three community reuse alternatives. The reuse alternatives expected to be evaluated in the EIS/EIR are Mixed Use/Historic, Industrial/Commercial, and Recreational/Historic. The "No Action" alternative would retain NFD Pt. Molate as a closed facility remaining in federal caretaker status.

## **III. REUSE ALTERNATIVES TO BE EVALUATED IN THE EIS/EIR**

The **Mixed Use/Historic Alternative** would include development of publicly oriented/recreational uses such as a shoreline park, trails, ballfields, public market/plaza, amphitheater, promenade and light industrial and commercial uses such as incubator businesses, retreat and conference center, bed and breakfast, live/work space and restaurants. This alternative also includes single- and multifamily residential uses, a heliport, ferry service and a winery. The **Industrial/Commercial Alternative** would include some of the publicly oriented and recreational uses listed above but would develop light industrial and warehouse facilities on sites designated for residential development in the Mixed Use Alternative. The **Recreational/Historic Alternative** introduces gardens, small lakes, golf course, pier developments, environmental science center, wetlands and wildlife habitat, and a medium sized hotel in an addition to the other publicly oriented and recreational land-uses listed above.

## **IV. NAVY ACTIONS TO BE EVALUATED IN THE EIS/EIR**

### *Federal Disposal*

Federal Disposal is included in the document to evaluate the impacts that would occur from the disposal of NFD Pt. Molate property out of federal ownership. For example, if the transfer of the property in itself lessens the protection of a sensitive resource, this would be discussed in the Environmental Consequences chapter of the EIS/EIR as a impact under Federal Disposal.

### *No Action Alternative*

Evaluation of the No Action Alternative in this EIS/EIR is required by NEPA and CEQA and provides a benchmark against which proposed federal action are evaluated. The closure of NFD Pt. Molate property has been mandated and must be implemented. For this reason, the No Action Alternative evaluates the facility as closed but remaining in federal ownership. Disposal would not occur under this alternative.

## **V. POTENTIAL ENVIRONMENTAL ISSUES TO BE EVALUATED IN THE EIS/EIR**

The EIS/EIS will evaluate the potential for environmental impacts to:

- Potential for increased **transportation** demand
- Impacts on **cultural** resources
- Potential for increased **air emissions**
- Impacts on **biological** resources
- **Utility** system upgrades
- Identification and remediation of **hazardous materials** and **hazardous waste**



Army Total Personnel Command,  
ATTN: TAPC-PDR-P, Stop C55, Ft.  
Belvoir, VA 22060-5576.

**FOR FURTHER INFORMATION CONTACT:** Ms.  
Janice Thornton at (703) 806-4390 or  
DSN 656-4390.

**SUPPLEMENTARY INFORMATION:** The  
Department of the Army's record system  
notices for records systems subject to  
the Privacy Act of 1974 (5 U.S.C. 552a),  
as amended, have been published in the  
**Federal Register** and are available from  
the address above.

The Department of the Army proposes  
to amend the preamble to the Army's  
compilation of Privacy Act systems of  
records notices. The amendment  
consists of deleting the *For more*  
*information contact:* paragraph, and  
adding two new paragraphs as follows.

Dated: September 9, 1997.

L. M. Bynum,

*Alternate OSD Federal Register Liaison  
Officer, Department of Defense.*

\* \* \* \* \*

**For Further Assistance:**

Any questions should be addressed to  
the Privacy Act Officer, Records  
Management Program Division, U.S.  
Army Total Personnel Command,  
ATTN: TAPC-PDR-P, Stop C55, Ft.  
Belvoir, VA 22060-5576.

**Point of Contact:**

Ms. Janice Thornton at (703) 806-  
4390 or DSN 656-4390.

\* \* \* \* \*

[FR Doc. 97-24284 Filed 9-12-97; 8:45 am]

BILLING CODE 5000-04-F

**DEPARTMENT OF DEFENSE**

**Department of the Navy**

**Notice of Intent To Prepare a Joint  
Environmental Impact Statement/  
Environmental Impact Report (EIS/EIR)  
for the Proposed Disposal and Reuse  
of the Fleet and Industrial Supply  
Center, Naval Fuel Depot Point Molate,  
Richmond, CA**

**SUMMARY:** Pursuant to Section 102(2)(c)  
of the National Environmental Policy  
Act (NEPA) of 1969 as implemented by  
the Council on Environmental Quality  
regulations (40 CFR parts 1500-1508),  
and the California Environmental  
Quality Act (CEQA), the Department of  
the Navy in coordination with the City  
of Richmond is preparing a joint  
Environmental Impact Statement/  
Environmental Impact Report (EIS/EIR)  
for the proposed disposal and reuse of  
the Fleet and Industrial Supply Center,

Naval Fuel Depot Point Molate (NFD Pt.  
Molate), Richmond, California. The  
Navy will be the lead agency for NEPA  
documentation and the City of  
Richmond will be the lead agency for  
CEQA documentation.

The Defense Base Closure and  
Realignment Act (Pub. L. 101-510) of  
1990, as implemented by the base  
closure process of 1995, directed the  
Navy to close the NFD Pt. Molate. Pub.  
L. 102-484, Section 2834, as amended  
by Pub. L. 104-106, Section 2867,  
permits the Navy to dispose of NFD Pt.  
Molate to the City of Richmond.

**Background**

NFD Pt. Molate is within the  
jurisdiction of the City of Richmond and  
consists of 419 acres of land on the  
northeast shoreline of San Pablo Bay.  
The property includes several large  
underground storage tanks, the  
Winehaven historic district listed on the  
National Register of Historic Places, and  
administration and support buildings.  
The joint EIS/EIR will address Navy  
disposal of the property and the  
potential impacts associated with three  
community reuse alternatives and a "no  
action" alternative. The City of  
Richmond Blue Ribbon Advisory  
Committee developed the Point Molate  
Reuse Plan which identifies a mixture of  
land-uses, and serves as a guide to  
develop the three community reuse  
alternatives. The reuse alternatives  
expected to be evaluated in the EIS/EIR  
are: Mixed Use/Historic, Industrial/  
Commercial, and Recreational/Historic.  
The "No Action" alternative would  
retain NFD Pt. Molate as a closed  
facility remaining in federal caretaker  
status.

The Mixed Use/Historic Alternative  
would include development of publicly  
oriented uses such as a shoreline park,  
trails, ballfields, public market/plaza,  
amphitheater, promenade, and light  
industrial and commercial uses such as  
incubator businesses, retreat and  
conference center, bed and breakfast,  
live/work space, and restaurants. That  
alternative also includes single- and  
multi-family residential uses, a heliport,  
ferry service and a winery. The  
Industrial/Commercial Alternative  
would include some of the publicly  
oriented uses listed above, but would  
develop light industrial and warehouse  
facilities on sites designated for  
residential development in the Mixed  
Use/Historic Alternative. The  
Recreational/Historic Alternative  
introduces gardens, small lakes, golf  
course, pier developments,  
environmental science center, wetlands  
and wildlife habitat, and a medium  
sized hotel in an addition to some of the

other publicly oriented and recreational  
land-uses listed above.

The EIS/EIR will evaluate the  
potential for environmental impacts to  
traffic conditions, air quality, biological  
resources, cultural resources, utilities,  
and other environmental issues  
identified through this scoping process.

**ADDRESSES:** The Department of the Navy  
is initiating a scoping process for the  
purpose of determining the scope of issues  
to be addressed and for identifying  
significant issues relative to this  
proposed action. A public meeting to  
receive oral comments from the public  
will be held on Wednesday, October 1,  
1997, at 6:00 pm, at 2600 Barrett  
Avenue, City of Richmond Council  
Chambers. The Navy and the City of  
Richmond representatives will briefly  
summarize the reuse planning and  
environmental impact assessment  
processes, and will then solicit public  
comments to identify the scope of  
environmental impact analysis. It is  
important that federal, state, and local  
agencies, and interested individuals are  
present or represented in the scoping  
process to assist the Navy and the City  
of Richmond in evaluating the range of  
issues and reuse alternatives to be  
addressed. In the interest of allowing  
everyone a chance to participate,  
speakers will be requested to limit their  
oral comments to five (5) minutes.  
Written comments or questions  
regarding the scoping process and/or  
EIS/EIR should be postmarked no later  
than Monday, October 20, 1997 and sent  
to the following addresses.

**FOR FURTHER INFORMATION CONTACT:** Ms.  
Noreen Roster (Code 703), Engineering  
Field Activity West, Naval Facilities  
Engineering Command, 900 Commodore  
Drive, San Bruno, California 94066-  
5006, telephone (415) 244-3021, fax  
(415) 244-3206. For information  
concerning the EIR, please contact Ms.  
Natalia Lawrence or Ms. Nancy  
Kaufman, Planning Department, the City  
of Richmond, California, telephone  
(510) 620-6706, fax (510) 620-6858. For  
further information regarding the Point  
Molate Reuse Plan, please contact Ms.  
Patricia Jones, Office of the City  
Manager at (510) 620-6952, fax (510)  
620-6542, or Ms. Natalia Lawrence or  
Ms. Nancy Kaufman, Planning  
Department.

Dated: September 10, 1997.

**Michael D. Sutton,**

*LCDR, JAGC, USN, Federal Register Liaison  
Officer.*

[FR Doc. 97-24394 Filed 9-12-97; 8:45 am]

BILLING CODE 3810-FF-P

*This page intentionally left blank.*



# DEPARTMENT OF THE NAVY

ENGINEERING FIELD ACTIVITY, WEST  
NAVAL FACILITIES ENGINEERING COMMAND  
900 COMMODORE DRIVE  
SAN BRUNO, CALIFORNIA 94066-5006

IN REPLY REFER TO:

5090.1B  
703NR/EP-1346  
16 September 1997

## PUBLIC NOTICE

**Subject:** Notice of Scoping of Public Concerns regarding an Environmental Impact Statement/Environmental Impact Report for the Proposed Disposal and Reuse of the Fleet and Industrial Supply Center, Naval Fuel Depot Point Molate, Richmond, California

Pursuant to Section 102(2) (c) of the National Environmental Policy Act (NEPA) of 1969 as implemented by the Council on Environmental Quality regulations (40 CFR Parts 1500-1508), and the California Environmental Quality Act (CEQA), the Department of the Navy in coordination with the City of Richmond is preparing a joint Environmental Impact Statement/Environmental Impact Report (EIS/EIR) for the proposed disposal and reuse of the Fleet and Industrial Supply Center, Naval Fuel Depot Point Molate, Richmond, California. The Defense Base Closure and Realignment Act (Public Law 101-510) of 1990, as implemented by the base closure process of 1995, directed the Navy to close Fleet and Industrial Supply Center, Naval Fuel Depot Point Molate (NFD Pt. Molate). The Navy will be the lead agency for NEPA documentation and the City of Richmond will be the lead agency for CEQA documentation. Public Law 102-484, Section 2834, as amended by Public Law 104-106, Section 2867, permits the Navy to dispose of NFD Pt. Molate to the City of Richmond.

We are requesting federal, state, and local agencies, and interested individuals to participate in the scoping process to assist the Navy and City of Richmond in evaluating the range of issues and reuse alternatives to be addressed.

**A public scoping meeting to receive oral and written comments will be held on  
October 1, 1997, at 6:00 pm, at 2600 Barrett Avenue,  
City of Richmond Council Chambers.**

The Navy and City of Richmond representatives will briefly summarize the reuse planning and environmental impact assessment processes, and will then solicit public comments to identify the scope of environmental impact analysis. In the interest of allowing everyone a chance to participate, speakers will be requested to limit their oral comments to five (5) minutes. Written comments are welcomed, either at the meeting or by mail during the scoping period.

NFD Pt. Molate is within the jurisdiction of the City of Richmond and consists of 419 acres of land on the northeast shoreline of San Pablo Bay. The property includes several large underground storage tanks, the Winehaven historic district listed on the National Register of Historic Places, and administration and support buildings.

The joint EIS/EIR will address Navy disposal of the property and the potential impacts associated with three community reuse alternatives and a "no action" alternative. The City of Richmond Blue Ribbon Advisory Committee developed the Point Molate Reuse Plan which identifies a mixture of land-uses, and serves as a guide to develop the three community reuse alternatives. The reuse alternatives expected to be evaluated in the EIS/EIR are Mixed Use/Historic, Industrial/Commercial, and Recreational/Historic. The "No Action" alternative would retain NFD Pt. Molate as a closed facility remaining in federal caretaker status.

The Mixed Use/Historic Alternative would include development of publicly oriented/recreational uses such as a shoreline park, trails, ballfields, public market/plaza, amphitheater, promenade and light industrial and commercial uses such as incubator businesses, retreat and conference center, bed and breakfast, live/work space and restaurants. This alternative also includes single- and multifamily residential uses, a heliport, ferry service and a winery. The Industrial/Commercial Alternative would include some of the publicly oriented and recreational uses listed above but would develop light industrial and warehouse facilities on sites designated for residential development in the Mixed Use Alternative. The Recreational/Historic Alternative introduces gardens, small lakes, golf course, pier developments, environmental science center, wetlands and wildlife habitat, and a medium sized hotel in an addition to the other publicly oriented and recreational land-uses listed above.

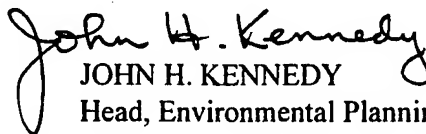
The EIS/EIR will evaluate the potential for environmental impacts to traffic conditions, air quality, biological resources, cultural resources, utilities, and other environmental issues identified through this scoping process.

Written comments must be received no later than October 20, 1997 in order to be considered in this scoping process. They should be addressed to:

Naval Facilities Engineering Command  
Engineering Field Activity West  
Attn: Ms. Noreen Roster, Code 703  
900 Commodore Drive  
San Bruno, CA 94066-5006  
Phone (415) 244-3021, Fax (415) 244-3206

For information concerning the EIR, please contact the City of Richmond, Planning Department, Ms. Natalia Lawrence or Ms. Nancy Kaufman, telephone (510) 620-6706, fax (510) 620-6858. For further information regarding the Point Molate Reuse Plan, please contact Ms. Patricia Jones, Office of the City Manager at (510) 620-6952, fax (510) 620-6542, or Ms. Natalia Lawrence or Ms. Nancy Kaufman, Planning Department, (510) 620-6706, fax (510) 620-6858.

Thank you for participating with the Navy and the City of Richmond in the environmental planning process.

  
JOHN H. KENNEDY  
Head, Environmental Planning Branch

---

**PUBLIC NOTICE**

---

**PUBLIC NOTICE**

---

Notice of Scoping of Public Concerns regarding an Environmental Impact Statement/Environmental Impact Report for the Proposed Disposal and Reuse of the Fleet and Industrial Supply Center, Naval Fuel Depot Point Molate, Richmond, California

Pursuant to Section 102(2) (c) of the National Environmental Policy Act (NEPA) of 1969 as implemented by the Council on Environmental Quality regulations (40 CFR Parts 1500-1508), and the California Environmental Quality Act (CEQA), the Department of the Navy in coordination with the City of Richmond is preparing a joint Environmental Impact Statement/Environmental Impact Report (EIS/EIR) for the proposed disposal and reuse of the Fleet and Industrial Supply Center, Naval Fuel Depot Point Molate, Richmond, California. The Defense Base Closure and Realignment Act (Public Law 101-510) of 1990, as implemented by the base closure process of 1995, directed the Navy to close Fleet and Industrial Supply Center, Naval Fuel Depot Point Molate (NFD Point Molate). The Navy will be the lead agency for NEPA documentation and the City of Richmond will be the lead agency for CEQA documentation. Public Law 102-484, Section 2834, as amended by Public Law 104-106, Section 2867, permits the Navy to dispose of NFD Point Molate to the City of Richmond.

We are requesting federal, state, and local agencies, and interested individuals to participate in the scoping process to assist the Navy and City of Richmond in evaluating the range of issues and reuse alternatives to be addressed.

A public scoping meeting to receive oral and written comments will be held on  
October 1, 1997, at 6:00 p.m., at 2600 Barrett Avenue,  
City of Richmond Council Chambers.

The Navy and City of Richmond representatives will briefly summarize the reuse planning and environmental impact assessment processes, and will then solicit public comments to identify the scope of environmental impact analysis. In the interest of allowing everyone a chance to participate, speakers will be requested to limit their oral comments to five (5) minutes. Written comments are welcomed, either at the meeting or by mail during the scoping period.

NFD Point Molate is within the jurisdiction of the City of Richmond and consists of 419 acres of land on the northeast shoreline of San Pablo Bay. The property includes several large underground storage tanks, the Winehaven historic district listed on the National Register of Historic Places, and administration and support buildings.

The joint EIS/EIR will address Navy disposal of the property and the potential impacts associated with three community reuse alternatives and a "no action" alternative. The City of Richmond Blue Ribbon Advisory Committee developed the Point Molate Reuse Plan which identifies a mixture of land-uses, and serves as a guide to develop the three community reuse alternatives. The reuse alternatives expected to be evaluated in the EIS/EIR are Mixed Use/Historic, Industrial/Commercial, and Recreational/Historic. The "No Action" alternative would retain NFD Point Molate as a closed facility remaining in federal caretaker status.

The Mixed Use/Historic Alternative would include development of publicly oriented/recreational uses such as a shore line park, trails, ballfields, public market/plaza, amphitheater, promenade and light industrial and commercial uses such as incubator businesses, retreat and conference center, bed and breakfast, live/work space and restaurants. This alternative also includes single- and multifamily residential uses, a heliport, ferry service and a winery. The Industrial/Commercial Alternative would include some of the publicly oriented and recreational uses listed above but would develop light industrial and warehouse facilities on sites designated for residential development in the Mixed Use Alternative. The Recreational/Historic Alternative introduces gardens, small lakes, golf course, pier developments, environmental science center, wetlands and wildlife habitat, and a medium sized hotel in addition to the other publicly oriented and recreational land-uses listed above.

The EIS/EIR will evaluate the potential for environmental impacts to traffic conditions, air quality, biological resources, cultural resources, utilities and other environmental issues identified through this scoping process.

Written comments must be received no later than October 20, 1997 in order to be considered in this scoping process. They should be addressed to:

Naval Facilities Engineering Command  
Engineering Field Activity West  
Attn: Ms. Noreen Roster, Code 703  
900 Commodore Drive  
San Bruno, CA 94066-5006  
Phone (415) 244-3021, Fax (415) 244-3206

For information concerning the EIR, please contact the City of Richmond, Planning Department, Ms. Natalia Lawrence or Ms. Nancy Kaufman, telephone (510) 620-6706, fax (510) 620-6858. For further information regarding the Point Molate Reuse Plan, please contact Ms. Patricia Jones, Office of the City Manager at (510) 620-6952, fax (510) 620-6542, or Ms. Natalia Lawrence or Ms. Nancy Kaufman, Planning Department, (510) 620-6706, fax (510) 620-6858.

**PUBLIC SCOPING HEARING**  
**OF THE ENVIRONMENTAL IMPACT STATEMENT / ENVIRONMENTAL IMPACT REPORT**  
**ON THE DISPOSAL AND THE REUSE OF NAVAL FUEL DEPOT POINT MOLATE**

*OCTOBER 1, 1997*

**ATTENDEES**

NAME	AFFILIATION
Bruce Beyaert	Point Richmond Neighborhood Council
Mark Bonino	U.S. Navy, EFA West
Marielle Booktz	Chevron
Shirley Butt	Point Richmond Neighborhood Council
Mayor Rosemary Corbin	City of Richmond
Larry Douchard	U.S. Navy
Jonathan Driller	ORCHIDNET
Lucretia Edwards	League of Women Voters
Sarah Eeles	BRAC Member
Afi Efiru	BADCAT
Lyle Fisher	Point Molate RAB
B. Force	R.P.D.
Sardi Genser	N&E Neighborhood Council
Don Gosney	Point Molate RAB Community Co-Chair
Ed Guldner	Fleet Industrial Supply Center Oakland
Thomas Hilowing	
Blanche Jaggi	Sierra Club
Patricia R. Jones	City of Richmond
Nancy Kaufman	City of Richmond
Lasandra King	Fleet Industrial Supply Center BRAC Office
Bryan Kravitz	The Channel
Lynn Maack	
John Margowsky	Wickland
Jim McMullen	
Scott Moore	Chevron
Nagaraja R. Rao	RAAB / Parks & Recreation Commission
Jean Sui	East Bay Regional Parks District
Marcia Vallier	Point Richmond Business Association
Barbara Vincent	League of Women Voters
J.A. Vincent	Green Belt Alliance
Bill Wahbeh	
Brian Wiese	East Bay Regional Parks District
Alan A. Wolden	RRA
Lieutenant Steven Wolfe	Fleet Industrial Supply Center Oakland
SteveWysack	

CALIFORNIA STATE LANDS COMMISSION  
100 Howe Avenue, Suite 100 South  
Sacramento, CA 95825-8202



ROBERT C. HIGHT, *Executive Officer*  
(916) 574-1800 FAX (916) 574-1810  
*California Relay Service From TDD Phone 1-800-735-  
from Voice Phone 1-800-735-2...*

Contact Phone: (916) 574-1858  
Contact FAX: (916) 574-1925

October 20, 1997

File Ref: W25352

Naval Facilities Engineering Command  
Engineering Field Activity West  
Attn.: Ms. Noreen Roster, Code 703  
900 Commodore Drive  
San Bruno, CA 94066-5006

RE: Notice of Scoping for an EIS/EIR Concerning the Disposal and Reuse of  
Naval Fuel Depot Pt. Molate

Dear Ms. Roster:

This is written to provide our comments to the Notice of Scoping prior to the preparation of an EIS/EIR for the proposed disposal of Naval Fuel Depot Point Molate in Richmond California. Our purpose in writing is to advise you of the role of the State Lands Commission in tide and submerged lands at the facility, including the grant in trust of such interests to the City of Richmond.

The State Lands Commission is charged by the California Public Resources Code with the administration of the title interests of the State of California in tide and submerged lands and in inland navigable waterways. San Francisco Bay off of Point Molate is one such property. In many cases, the State has made a grant of tide and submerged lands to local government for the creation of commercial harbors, marinas, parklands, and for other uses. A grant of salt marsh, tide and submerged lands was made in the area of Point Molate by the State to the City of Richmond through Chapter 379, Statutes of 1935. Chapter 379 and the public trust doctrine generally describe the terms by which the City of Richmond administers its tide and submerged lands.

We have examined the map titled "Point Molate Conceptual Reuse Alternatives" sent with the September 16, 1997, public notice. We have also completed a preliminary title analysis of Point Molate and the areas in the Bay off of it. Our preliminary conclusion is that the facility is made up of several types of lands:

Ms. Noreen Roster

October 20, 1997

Page 2

- First, there are uplands within the facility which were within the rancho known as San Pablo Rancho. These lands are not subject to the public trust.
- Second, there are areas along today's shoreline and in today's Bay which were lotted out and sold in the last century by the Board of Tideland Commissioners. The case entitled City of Berkeley v. The Superior Court of Alameda County (1980) 26 Cal.3d 515 holds that these lands remain subject to a public trust easement to the extent that they were subject to the tides in 1980. If the shoreline in the area has not changed since that time, today's shoreline will be a general indicator of the division between public trust lands and lands to which the public trust does not apply;
- Third, there are lands in the Bay which lay waterward of the Board of Tideland Commissioners's lots, and which appear to have never been sold by the State. The lands under the pier are an example. These lands are subject to the public trust and the grant to the City of Richmond. The documents which we have do not address the source of the Navy's title interest in this water-covered area (such as by lease from Richmond).

From the map of conceptual reuse alternatives, it appears that the uses contemplated for lands subject to the public trust are either open water or the operation of the pier for ferry service. These uses do not conflict with the grant to Richmond, nor with the public trust generally. Alternative 3 includes the category "pier developments," without more explanation. Although the uses in that category may be acceptable, more information will be needed to assure that they comply with Richmond's legislative grant.

Thank you for the opportunity to comment.

Sincerely,



Dave Plummer  
Public Land Manager

cc: Heather Wheeler  
Natalia Lawrence



DEPARTMENT OF TRANSPORTATION

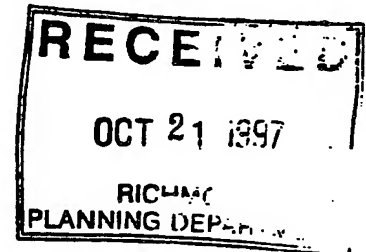


DX 23660  
 AKLAND, CA 94623-0660  
 10) 286-4444  
 10) (510) 286-4454

October 20, 1997

CC-580-6.01  
 SCH#97092028  
 CC580106

Mr. Jim Farah, Planning Director  
 Planning Department  
 City of Richmond  
 2600 Barrett Ave.  
 Richmond, CA 94804



Attention: Nancy Kaufman, Senior Planner

Dear Mr. Farah:

**Re: NOTICE OF SCOPING of Public Concerns regarding an Environmental Impact Statement/Environmental Impact Report (EIS/EIR) for the Proposed Disposal and Reuse of the Fleet and Industrial Supply Center, Naval Fuel Depot Point Molate**

Thank you for including the California State Department of Transportation (Caltrans) in the environmental review process. We have reviewed the above referenced document and forward the following comments:

A traffic analysis should be prepared for this proposal to assess the impacts on SR580 and its interchange with Western Drive and all affected streets and controlling intersections. The analysis should include trip generation, distribution and assignment, average daily traffic volumes, AM and PM peak hour volumes and level of service for all affected State facilities. The methodologies used in compiling the information should be explained. Trip distribution information should be based on a realistic estimate of where the patrons, tenants and employees of the proposed development will originate and based on the potential impacts associated with the three community reuse alternatives, namely Mixed Use/Historic, Industrial/Commercial, and Recreational/Historic. The data should be calculated for each of the following conditions illustrated with appropriate turning movement diagrams:

- Existing traffic
- Existing plus project traffic
- Existing plus project plus cumulative traffic

Calculation of cumulative traffic volumes should consider all traffic-generating developments, both approved and pending, that would affect the facilities evaluated, and should not be limited to projects under the jurisdiction of the lead agency. Maps depicting these developments should be included.

The analysis must include adequate mitigation for impacts to State highway facilities. In addition to highway improvements, mitigation measures should also consider non-highway improvements such as:

- Provision of information on transit and rideshare matching services to all prospective patrons, tenants and employees of the preferred alternative
- Coordination with the West Contra Costa Transportation to provide bus shelters with seating at any future bus pullouts
- Inclusion of internal non-motorized facilities in the design of the project and, as feasible, incorporation of such facilities into local and regional bicycle and pedestrian systems
- Implementation of transit services with particular emphasis on express service to regional rail stations

Additionally, all mitigation proposed should be fully discussed in the environmental document. This discussion should include but not be limited to the Cost, Financing, Scheduling, Lead agency monitoring, and Implementation responsibilities.

We look forward to reviewing the EIS/EIR for this project. We expect to receive a copy from the State Clearinghouse, but to expedite our review you may send two copies in advance to:

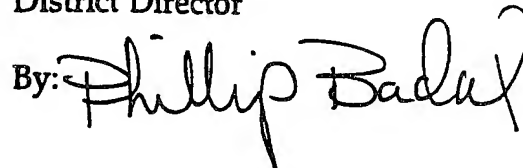
Office of Transportation Planning  
IGR/CEQA Branch  
Caltrans, District 4  
Oakland, CA 94623-0660

Should you have questions on these comments, please contact Melinda Pagaduan of my staff at (510) 286-5544.

Sincerely,

HARRY Y. YAHATA  
District Director

By:



PHILLIP BADAL  
District Branch Chief  
IGR/CEQA

# REGIONAL PARKS

## EAST BAY REGIONAL PARK DISTRICT

October 14, 1997

Noreen Roster  
Engineering Field Activity West  
Naval Facilities Engineering Command  
900 Commodore Drive  
San Bruno, CA 94066

### BOARD OF DIRECTORS

Doug Sison  
President  
Jean Shi  
Vice-President  
Randy Lane  
Treasurer  
Carol Brown  
Secretary  
Joeyann Condit  
Terri Harker  
John Stover  
Pat O'Brien  
General Manager

RE: Point. Molate Naval Fuel Depot Reuse Report: EIS / EIR, Scoping Document

Dear Ms. Roster:

The East Bay Regional Park District has been working closely with the City of Richmond as a member of its Blue Ribbon Advisory Committee to the Local Reuse Authority in preparing a plan for the restoration and reuse of Point Molate. The following comments are based on our participation in the preparation of the reuse plan and in our particular interest in the proposed open space and recreational aspects of the plan.

1. Plan Alternatives. Three alternatives are shown in the Notice: Mixed Use / Historic, Industrial/ Commercial, and Recreational / Historic. While each of these alternatives incorporates elements of the reuse plan adopted by the City of Richmond, no alternative reflects the plan as it was adopted. (The plan is most closely, but not exactly, reflected in Alternative 1). The EIS / EIR should add, or substitute for Alternative 1, an alternative which reflects the adopted plan.
2. Natural environment - baseline survey. Restoration and protection of the natural environment has been an overriding concern throughout the planning process. The environmental assessment should include a thorough survey and evaluation of natural resources on the site. In particular, an updated plant survey, conducted during the spring/summer flowering season, should be included.
3. Environmental remediation. The entire shoreline to the south of Pt. Molate, as well as much of the hillside areas, have been proposed to be maintained as parkland and open space for passive recreational uses. Thus, cleanup standards for the entire property should be remediated to a level acceptable for outdoor public recreation. The environmental assessment should specify areas of soil and groundwater contamination, proposed remediation measures and standards used cleanup levels. In addition, reuse of the existing buildings for public uses proposed in the reuse plan should be assessed.
4. Passenger ferry service. Ferry service was an activity not directly anticipated in the reuse plan. The environmental assessment should consider the amount, cost and impacts of

dredging and sediment disposal necessary to make ferry docking feasible, as well as impacts of ferry service on traffic and parking.

5. Golf course. The golf course was another use not recommended in the reuse plan. The environmental assessment should discuss visual impacts of the golf course, both from on- and off-shore, impacts on plant and animal communities, particularly animal migration routes, and on public access trails proposed within the hillside area.
6. Land ownership. The right-of-way of the Richmond Belt Line railroad has been proposed as a spur of the San Francisco Bay Trail, extending ultimately from the Richmond - San Rafael bridge to Point San Pablo. The environmental assessment should verify the ownership of that portion of the right-of-way which crosses the U.S. Navy property.

Please do not hesitate to call me (635-0138, ext. 2623) or Martin Vitz, Advanced Planning Manager (ext. 2621) should you have any questions on these comments or on the District's interests. Subsequent environmental documents should be addressed to Brad Olson, Environmental Specialist, at this address.

Sincerely,



Brian Wiese  
Park Planner

cc: Natalia Lawrence, City of Richmond



# Sierra Club

## West Contra Costa County Group

---

October 16, 1997

Naval Facilities Engineering Command  
Engineering Field Activity West

Ms Noreen Roster,

The attached document is contains the comments of the West Contra Costa County Group of the Sierra Club to the Draft Concept Paper Point Molate Reuse Alternative document.

Sincerely

Debbi Landshoff  
Chair  
West County Regional Group  
1560 Santa Clara Street  
Richmond, CA 94804

cc: Ms Helen Burke, Chair, Sierra Club Bay Chapter  
Honorable Rosemary Corbin, Mayor, City of Richmond  
Fred Beddall, Conservation Staff, Sierra Club Bay Chapter

SIERRA CLUB COMMENTS ON THE SCOPE OF THE EIS/EIR  
FOR DISPOSAL AND REUSE OF POINT MOLATE NAVAL FUEL DEPOT

Comments on Alternatives to the Reuse Plan Adopted by the LRA

The Navy's September 16, 1997 Public Notice of the October 1 Scoping Meeting for this EIS/EIR states that the City of Richmond's Reuse Plan "serves as a guide to develop the three community reuse alternatives". The Reuse Plan developed by the City's Blue Ribbon Advisory Committee (BRAC) and adopted by the LRA should be considered the proposed reuse action -- not merely as a guide for concoction of hypothetical alternatives, which were not embraced by either the BRAC or LRA. Whereas the EIS/EIR must consider alternatives to the proposed action, including "no action", the primary focus should be on the course of action adopted by the City of Richmond.

The Sierra Club recommends that the following issues be considered in analyzing the proposed Light Industrial/Warehouse, Recreational/Historic and No Action alternatives.

Light Industrial/Warehouse Alternative

The Public Notice for the Scoping Meeting states that this alternative involves "light industrial and warehouse facilities", whereas the map of Point Molate Conceptual Reuse Alternatives uses the term "industrial/commercial". For a meaningful analysis, the EIS/EIR must tightly define and limit the types of facilities which would be allowed and will be analyzed under this alternative. For example, pages 1-43 and 44 of the March, 1997 Point Molate Reuse Plan describe the types of industrial and light industrial facilities which would be allowed in the Building 6 area. Worst case parameters will have to be developed for such critical issues as heavy and light truck traffic, rail traffic, parking needs, utility requirements and contaminant discharges to the air, land and water.

A critical issue to be considered in the EIS/EIR is the fundamental incompatibility of industrial and warehouse uses with the other uses included in this Alternative, i.e. the "green" and "orange" uses shown on the map of alternatives such as public recreation and cultural, educational and overnight uses of the Historic District.

In commenting on the January, 1997 Draft Point Molate Reuse Plan, the Environmental Subcommittee of the City of Richmond's Blue Ribbon Advisory Committee concluded that "... light industrial use is both infeasible and incompatible with other proposed uses..." for the following stated reasons:

"If light industrial operations take place in the Northern Development Area on the



Building 6 site, the architectural character and truck traffic generated could be incompatible with the adjacent historic district, proposed public uses in the Winehaven area and with proposed retreat/conference center operations nearby. If light industry is sited on the Bay side of Western Drive in the Southern Development Area, it would make a poor "gateway" for the proposed Point Molate historical village concept and interfere with the sweeping open vistas of the Bay."

"The Plan's market analysis concludes on page III-12:

- \* "Industrial brokers and developers interviewed for this study feel that light industrial/warehouse development may not be an appropriate reuse for Point Molate";
- \* "The developers and brokers interviewed felt that Point Molate's views, open space, and potential recreational uses may be of greater value to the City of Richmond than the possible benefits of reusing the site for light industrial or warehouse development"; and
- \* "Point Molate appears to be poorly positioned to support development of office, light industrial or warehouse uses, especially for multiple tenants."

The EIS/EIR should take into account all of these considerations in analyzing the industrial/warehouse alternative.

#### Recreational/Historic Alternative

The inclusion of a golf course in this alternative seems impractical and unwise. Is it really feasible to build a golf course and play golf on such steep hillsides? If it is feasible to construct a golf course and play golf, crucial issues in the analysis of this reuse will include the water needs, handling of water runoff, contamination of the Bay and surface waters with chemicals from fertilizers and pesticides, erosion and landslide potential and impacts on native plants and wildlife. In particular, this includes impacts on the hillside coastal prairie plant communities, *Dichondra donnelliana*, which is not found elsewhere in the East Bay, and willow groves, which are important to wildlife. Development of the steep hillsides is inconsistent with the Goals and Objectives of the BRAC's Environmental Subcommittee to "Encourage the siting of new development in areas previously developed and away from hillsides" and "Minimize the risk to people, property and the environment due to ... slide areas and flooding".

The Navy's July 10, 1997 Draft Concept Paper on Point Molate Reuse Alternatives presented to the City of Richmond on July 10, 1997 referred to the extensive water needs of this alternative and suggested use of tertiary treated domestic wastewater. What would be the source of this treated wastewater? Would a new sewage treatment plant be built at Point Molate or would this treated wastewater be pipelined to Point Molate from an existing sewage plant? The Navy's July 10 Concept Paper mentions tertiary water treatment as taking place at the site of the Environmental Science Center proposed under this alternative. The EIS/EIR should analyze the environmental and

economic impacts of supplying tertiary treated wastewater to Point Molate.

Siting of an amphitheater, which is proposed in each of the three reuse alternatives, is also a sensitive issue. The Reuse Plan (pages I-53 and 54) suggests that an amphitheater might be located either in the shoreline park "at the end of the pier" or "in the hillside open space". The BRAC rejected a proposal in the Draft Reuse Plan to site an amphitheater against the steep remnant coastal bluff on the south side of the Point Molate peninsula. This was based on the following recommendation from the BRAC Environment Subcommittee:

"Although an amphitheater or other facility for outdoor concerts is a good concept, the amphitheater should not be sited against the "hillside" as described on page 1-50 and Figures 7 - 8, etc. First, the prevailing summer winds off the Bay would blow directly into the faces of the audience. Amphitheaters usually are sited to protect the audience from the elements, rather than pitting them against Mother Nature. Second, the "hillside" at the proposed site of the amphitheater has a sensitive coastal prairie plant community on top of it, as recognized on pages II-17 and II-34. Moreover, the Bay side of this hill has a sensitive coastal bluff plant community, which contains the CNPS List 4 marsh gum plant. This may be the only place in the East Bay where these declining plant communities are contiguous."

#### No Action Alternative

Based on two comprehensive Natural Resources Management Plans by consultants, the Navy had begun a program to control vegetation, reduce erosion, and enhance wildlife values at Point Molate NFD. (See the Natural Resources Management Plans of October 1987 by LSA Associates and April 1982 by Neil Havlik.) The EIS/EIR should address whether the City of Richmond will carry on this program, e.g. as a mitigation measure for conveyance of this Navy property. For example, a good vegetation management plan is necessary to control fire hazards and stop/reverse the encroachment of species such as eucalyptus, pampas grass and coyote brush on the native coastal prairie grasslands.

#### Native Plants And Plant Communities

Based on a brief (five-hour) reconnaissance survey conducted on May 16, 1996 by the California Native Plant Society (CNPS) East Bay Chapter, the Point Molate NFD contains remarkably intact coastal prairie communities with a richer diversity of perennial grasses than seen elsewhere in the East Bay. Point Molate NFD also has special coastal bluff plant communities by virtue of having rocky bluffs at or near the water's edge -- a geologic setting not found in the East Bay outside of the Potrero Hills. The CNPS observed *Dichondra donelliana*, *Dudleya larinosa* (sea lettuce) and *Eriophyllum stachaeifolium* (seaside woolly sunflower), which are not found elsewhere in the East Bay. Marsh gum plant (*Grindelia stricta* var. *angustifolia*), a



CNPS List 4 rare plant, was also found at several sites. The CNPS report recommended "The results of this brief survey indicate that the grasslands, coastal bluffs, shoreline, salt marsh, and wetlands should be avoided when planning any development."

A comprehensive, professional plant survey of the entire Point Molate Naval Fuel Depot needs to be conducted at the appropriate blooming times to identify the locations of California special plants and plant communities, including the summer-blooming, Endangered Santa Cruz Tar Plant (*Holocarpha macradenia*), which has the potential to be present. (California Special Plants are defined on page 3-39 of the Navy's BRAC Cleanup Plan as follows: "California special plants include species that (1) are listed as endangered or threatened by the state or federal government; (2) are candidates for listing; (3) meet the criteria for listing as described in Section 15380 of California Environmental Quality Act guidelines; (4) are listed by the California Native Plant Society as rare or endangered; (5) are rare restricted, or declining; (6) are peripheral to the main population but threatened within California; (7) are closely associated with habitats that are declining in California (as examples, wetlands, riparian, old growth forest); or (8) have been designated as "sensitive" by federal land managers". Also see the Special Plants List of California Department of Fish and Game.)

Rare, threatened and endangered species of plants, of course, have special legal status and protection. It also is important to preserve the East Bay's full biological diversity by protecting and enhancing both individual species and plant communities which are located at Point Molate NFD but found nowhere else in the East Bay. Properly protected and managed, these special plant communities could provide an important educational resource for schoolchildren of Richmond and other East Bay communities.

### Refinery Hazards For Residents

Chevron has opposed the residential uses recommended by the BRAC and adopted by the LRA on the basis that it is unsafe to live near their refinery. If that is true, then Chevron needs to either improve the safety of their operations or shut down their Richmond Refinery. It is intolerable that Chevron be allowed to operate unsafely in the midst of nearby residential areas such as Point Richmond and the other neighborhoods around their refinery. Point Molate, at least, enjoys the physical buffer of the Potrero Hills to offer protection from the shock wave of an explosion. Most of the existing neighborhoods do not have this physical barrier to separate them from the refinery. Point Molate also is upwind from the refinery under the prevailing northwesterly winds. Some existing neighborhoods are usually downwind. If Chevron seriously believes that it is unsafe to live near their refinery, they should be required to purchase the development rights to Point Molate and to compensate existing nearby residents. This has major implications for all refineries which Chevron owns or operates.

The presence of a small, high quality, high density, pedestrian-oriented, mixed-use residential community would enhance other preferred reuses of Point Molate NFD such as parks, recreation, education and a conference center. Having people in residence and small service shops would make Point Molate a pleasanter and safer area, especially at night. It would also create jobs and generate tax revenues for the City.

### **Passenger Ferry Service**

A daily passenger ferry service to San Francisco is proposed under the Recreational/Historic alternative and may be part of the Mixed Use/Historic alternative although it does not appear on the map for that alternative. The EIS/EIR should analyze the feasibility and impacts of this reuse. The EIS/EIR should evaluate whether such a passenger ferry service would be economically feasible at this remote location. The peak traffic and parking requirements should be evaluated carefully. The extensive parking lot needs could take land away from public recreational uses planned under these alternatives. If a high-speed ferry were used, it might attract passengers from Marin away from the slow Larkspur ferries. This could create severe traffic congestion at the Castro exit from I-580, which is already heavily loaded during commute hours by the rapidly-growing traffic on the Richmond Parkway.

### **Public Trust Lands**

The EIS/EIR should address whether there are any Public Trust Lands at Point Molate NFD, e.g. tidelands, which will revert to the State of California.

October 2, 1997

363 W. Bissell Ave  
Richmond CA  
September 30, 1997

Dear Ms. Roster:

I am writing concerning the Environmental Impact statement for the naval facilities at Point Molate. While I doubt very much that Chevron will permit any housing in the area, nevertheless my choice of alternatives is the Mixed Use/Historic Alternative. It will bring more people into the area than light industry and warehouses. Look at all the vacant space at Marina Bay for an example. People like to go somewhere attractive and spend money.

The golf course is a ridiculous suggestion. Golf courses use an extraordinary amount of water and pesticides, and require expensive, skilled maintenance.

Except for the bookstores here, our recreational spending is spent in Marin County. It would be a pleasure to have an attractive, environmentally responsible area to visit at Point Molate. Richmond needs this badly.

Thank you for your attention to this.

sincerely,

Barbara Stauss







**Chevron**

October 13, 1997

**Chevron Products Company**  
P. O. Box 1272  
Richmond, CA 94802-0272

**W. D. Steelman**  
General Manager

Naval Facilities Engineering Command  
Engineering Field Activity West  
900 Commodore Drive  
San Bruno, CA 94066-5006

Attn: Ms. Noreen Roster, Code 703

**EIS/EIR for the Proposed Disposal and Reuse  
of the Fleet and Industrial Supply Center,  
Naval Fuel Depot Point Molate, Richmond, CA**

Dear Ms. Roster:

This letter transmits Chevron Richmond Refinery's comments on issues and topics which should be addressed in the Environmental Impact Statement/Environmental Impact Report (EIS/EIR) for the Proposed Disposal and Reuse of the Fleet and Industrial Supply Center, Naval Fuel Depot Point Molate, Richmond, California.

Chevron Richmond Refinery property borders the Naval Fuel Depot Point Molate on three sides. We are thus very interested in the proposed reuses for the Point Molate site. Our main concern is that any reuse be compatible with other land uses on the Point San Pablo Peninsula. It is important that the project setting be properly characterized in the EIS/EIR to ensure valid evaluations of the proposed reuse alternatives. The historical, predominant land use on the peninsula has been industrial. Chevron Richmond Refinery is a major, heavy industrial facility that has been in operation since 1902.

Each proposed reuse alternative's consistency with adopted plans and policies, including the City of Richmond General Plan, Richmond Zoning Ordinances, the Association of Bay Area Governments Bay Trail Plan, and the Bay Conservation and Development Commission San Francisco Bay Plan, should be covered in the EIS/EIR. General Goals of the General Plan should be reviewed, in addition to land use, economic and other General Plan elements. The analyses should not look at the Point Molate site "in a vacuum". Proposed reuses in combination with existing or planned neighboring uses could result in conflicts with the adopted plans and policies.

Ms. Noreen Roster  
October 7, 1997  
Page 2

The analyses should be done within the context of Pt. Molate being only a part of the Point San Pablo Peninsula.

The EIS/EIR should address the issues of public services and utilities (including police and fire protection), public health and safety (including emergency services and potential effects from existing site contamination), fiscal affects on the City of Richmond, and transportation/traffic impacts. The limited access to the Point Molate site would probably hamper the provision of emergency and other services. In case you are not aware, we do not and will not allow public access to or from the Point Molate site through the Richmond Refinery.

At the October 1, 1997 public scoping meeting, several speakers mentioned the desire to preserve or protect the natural resources, particularly plants and special species. Deer live in and around the Point San Pablo Peninsula hills. U.S. Navy personnel have previously told us that they have seen deer on the Point Molate site. The EIS/EIR should address potential impacts on the special species and plants as well as wildlife that live at or frequent the site.

Some of the proposed reuses include reuse of existing buildings and structures. The EIS/EIR should cover the presence of asbestos in and the structural stability of such buildings/structures. In addition, the aesthetics and visual impacts of the reuse alternatives should be analyzed.

We look forward to review of the DEIS/DEIR when it becomes available. If you have any questions for Chevron, please call Ms. Marielle Boortz at (510) 242-3585 or Mr. Scott Moore at (510) 242-2406.

Sincerely,

*W. D. Steelman*

W. D. Steelman

cc: Ms. Natalia Lawrence, City of Richmond Planning Dept.

## ORCHIDNET™

626 Humboldt Street, Richmond, California 94805-1970

Voice and Fax: 1-510-235-8815 WWW: <http://orchid.org> E-mail: [db4orchids@aol.com](mailto:db4orchids@aol.com)

October 15, 1997

Ms. Noreen Roster  
Project Manager  
Engineering Field Activity West  
Naval Facilities Engineering Command  
900 Commodore Drive  
San Bruno, California 94066

Dear Ms. Roster:

OrchidNet would like to add this comment to the Navy's proposals for Point Molate:

OrchidNet is a non-profit high technology plant conservation organization based in Richmond, California.

Over the past year we have gained public support for the establishment of our headquarters and indoor jungle attraction at Point Molate. We have endorsements from the City as well as neighborhood groups, local academic centers and from all those who we talk to.

OrchidNet has proposed taking over the twin Quonset huts at the entrance to Point Molate and converting these into an indoor tropical paradise that will both educate and entertain the public. In part of the building we also hope to house our micropropagation facility which will provide biotechnology internships to local youth and allow OrchidNet to expand our production and distribution of rare plants to the World. We will also install a small gift shop and provide meeting space for local environmental organizations and speakers.

This use of the Quonset huts fits in perfectly with most of the plans proposed. While OrchidNet's use of this building and adjacent land will work with almost any development scenario at Point Molate, we encourage the plan that includes development of a conference center and retention of the most open space possible.

OrchidNet is currently in the process of raising revenues for this proposed siting plan. We respectfully ask that this aspect of Point Molate development be given the highest priority possible.

Jonathan Driller  
Executive Director

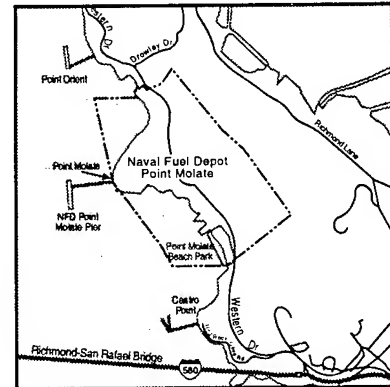






---

## C Excerpt, Point Molate Reuse Plan



---

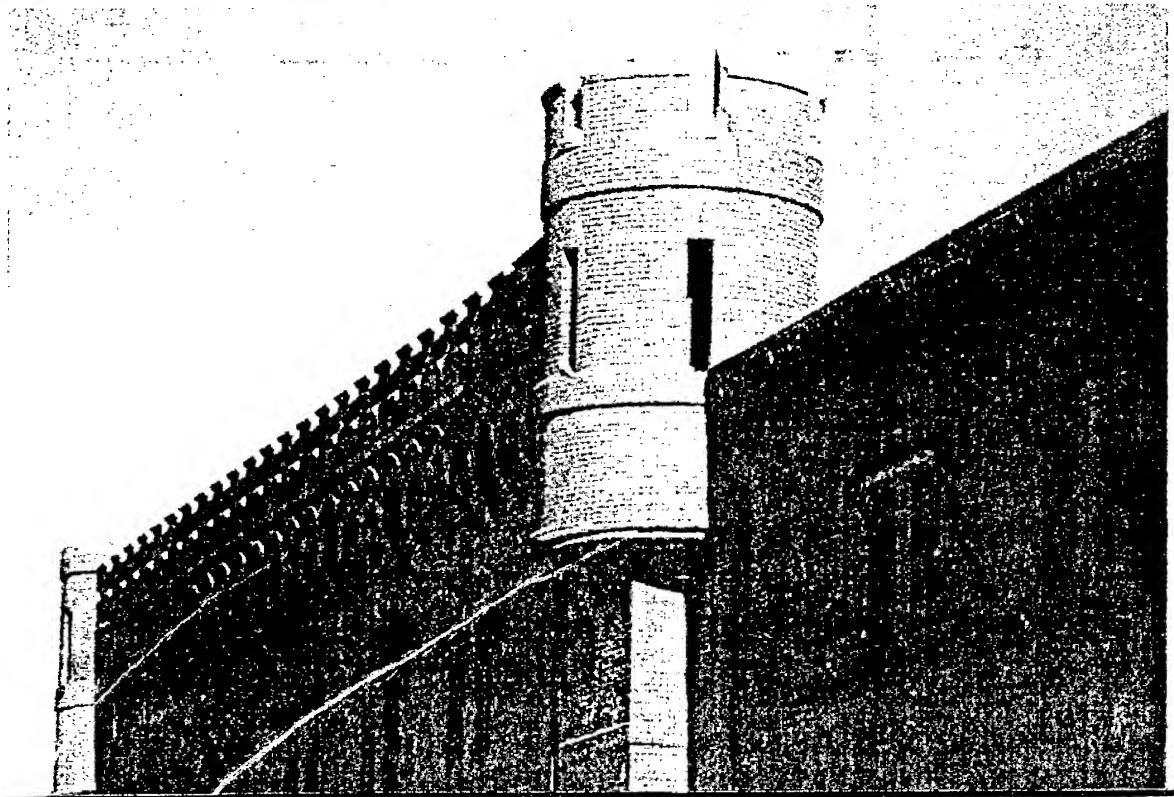
**APPENDIX C: EXCERPT, POINT MOLATE REUSE PLAN**  
**CONTENTS**

---

Page

Point Molate Draft Reuse Plan Excerpt: Reuse Plan Components .....	C-1
--	-----

# POINT MOLATE REUSE PLAN



R I C H M O N D • C A L I F O R N I A

Photograph by Thomas H. Cowling

■ ■ ■

SUBMITTED TO THE :  
CITY OF RICHMOND

MARCH, 1997

BRADY AND ASSOCIATES, INC. PLANNERS AND LANDSCAPE ARCHITECTS



C-1



Pages I-13 through I-66, following, have been excerpted from the Draft Point Molate Reuse Plan (City of Richmond 1997a). The complete document is available for review at the City of Richmond Planning Department.

The table of contents for this excerpt is as follows:

B. Reuse Plan Components.....	I-13
1. Thematic Concepts .....	I-19
2. Land Use Overview.....	I-23
3. Core Historic District.....	I-34
4. Northern Development Area.....	I-41
5. Central Development Area.....	I-45
6. Southern Development Area.....	I-46
7. Open Space, Parks, and Public Access.....	I-48
8. Transportation.....	I-55
9. Utility Infrastructure.....	I-58
10. Public Safety.....	I-64
11. Parcelization.....	I-65

*This page intentionally left blank*

availability of start-up funds, the unknown costs of upgrading the buildings and infrastructure, the remoteness of the site, and limited road access. It was pointed out that there are alternative sites in Contra Costa County with superior access and infrastructure for commercial and industrial uses. However, it was recognized that there is potential for a special user more amenable to limited building upgrades and campus-like layout, who is less dependent on accessibility. Point Molate's secluded location and separation from a dense urban area were perceived as the greatest constraints to live/work usage. However, there are examples of remote areas that are popular as live/work or as artist facilities including the Vulcan Foundry in industrial Oakland, an artist colony in the City of Benicia and Fort Cronkhite in the Marin Headlands, none of which are located near mass transit or business districts.

b. Focused Marketing Assessment of a Winery. The marketing analysis of a winery was much more positive. In general, small wineries are a strong market segment in the Northern California wine industry, which is still a relatively young industry. A majority of the small wineries do not have vineyards, primarily because of the high capital cost associated with land ownership, but there is a growing interest in developing vineyards because of recent shortages in grape supplies. Tasting rooms and other direct marketing techniques significantly contribute to the sales of wine. The incorporation of food into the marketing of wine, including associated restaurants, is a recent upward trend. No lodging has been built directly in association with a winery, but overnight accommodations are fully complementary. It is believed that the synergy of a winery, restaurant, retreat center, and on-site recreational amenities would be highly successful.

The Winehaven building, which is almost 200,000 square feet in size, is more than adequate to provide for the full spectrum of winery operations including crushing, fermentation, racking, aging, bottling, distribution, wine tasting and retail. Wineries range in size from approximately 20,000 square feet to 100,000 square feet or more. A fully operational winery would require large amounts of water and sewer infrastructure, particularly for the crushing and pressing processes.

Wine industry employment includes a small number of highly trained and educated workers and only a moderate number of low skilled workers who are typically trained on the job. The City could consider requiring the operator to hire local residents and to provide a job training program.

## **B. Reuse Plan Components**

This section of the Plan describes the types and intensities of land uses proposed for various locations throughout the site. Eventually, this information will be used to

amend the City of Richmond General Plan and to serve as a basis for developing zoning regulations at Point Molate.

The Plan concepts described in this chapter respond to: (1) the goals and objectives developed by the BRAC for Point Molate, and the findings of the four BRAC sub-committees; (2) the opportunities and constraints of the existing site resources, agency regulations and plans, legal encumbrances, and other conditions (Figures 3 and 4); and (3) a preliminary assessment of demand for potential land uses in today's market.

It is assumed that the Navy will undertake a full environmental clean-up of the site based on the priorities established as part of this Plan, and that use is not constrained by either known or unknown contamination. It is less certain how long it will take to complete the environmental clean-up program; however, it is assumed that clean-up will be accomplished within another five years.

The Plan takes into consideration the various regulatory and jurisdictional agencies that guide land use at Point Molate. Uses proposed in the off-shore areas, which are subject to tidal action and a State public trust easement administered by the City, are consistent with those specified in the Tidelands Public Trust Doctrine. Because the land at Point Molate is public, the entire site falls within BCDC jurisdiction, which designates it as "Waterfront Park, Beach." To accommodate all the uses in the proposed Plan, the BCDC San Francisco Bay Plan will need to be amended. The Plan's proposed uses correspond with provisions of the Bay Trail Plan developed by the Association of Bay Area Governments (ABAG), and East Bay Regional Park District's Master Plan. In addition, the Plan responds to pertinent City of Richmond General Plan policies regarding shoreline, ridgeline, open space, visual resource, historic preservation, access and existing and proposed zoning regulations. Upon approval of the Plan, the General Plan will be amended to reflect residential and other proposed uses instead of the current designation as Community and Recreational and Marine Industrial.

To some extent, there is incompatibility between Chevron and existing neighboring residential and commercial land uses, as well as those uses proposed for Point Molate. Although prevailing winds are to the east, in the event of an industrial accident, such as an explosion, during an infrequent period when the wind blows in the opposite direction, residents from any future approved residential uses, employees and visitors to Point Molate could potentially be exposed to toxic fumes or firespread. The 500-foot Potrero Ridge, which separates Point Molate from the refinery, would help mitigate if not prevent these effects. With only one road connection to I-580, evacuation could be hampered or made impossible, although potential refuge to the north could be sought.

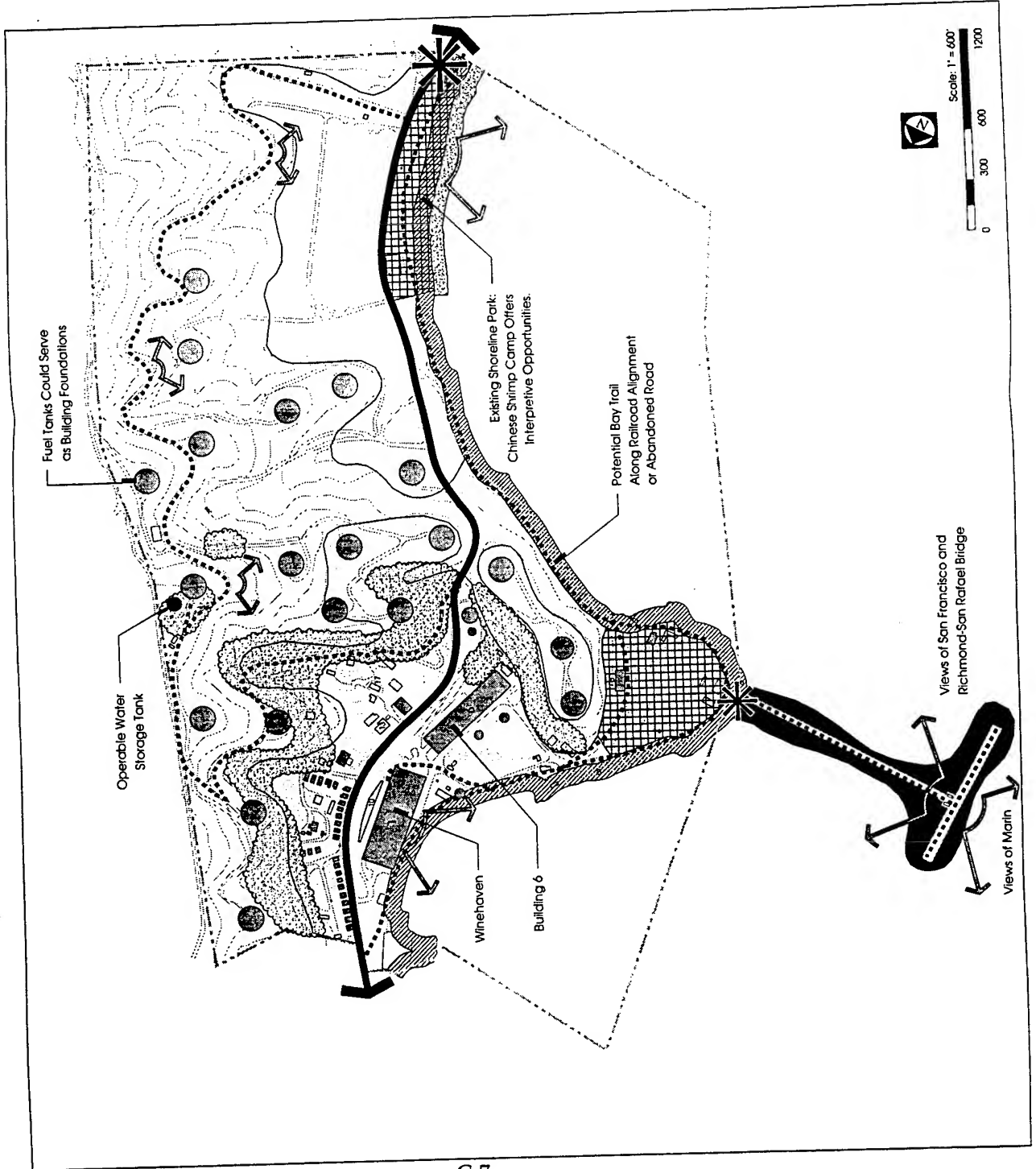




# POINT MOLATE REUSE PLAN City of Richmond

Figure 3:  
Opportunities

- Buildings with Reuse Potential
- Areas with 15% Slope or Less for New Development
- Potential Shoreline Access (BCDC)
- Potential Water Access and Docking
- Potential Park/Trail Staging Area
- Potential Gateway
- Potential Trail
- Eucalyptus Grove
- Beach
- Road Access
- Views
- Underground Fuel Tanks

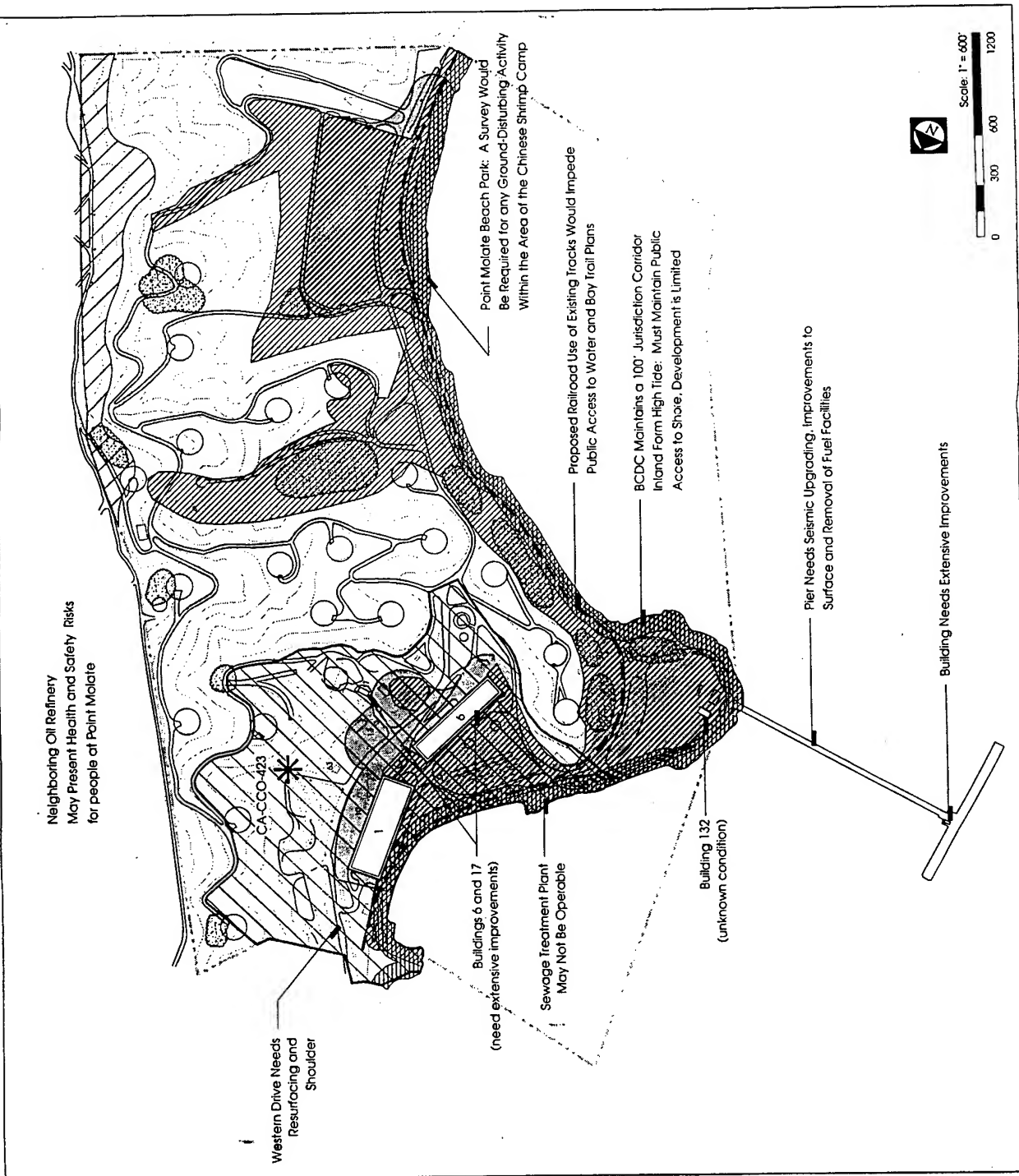




# POINT MOLATE REUSE PLAN City of Richmond

Figure 4:  
Constraints

- Questionable Building Reuse Potential
- 15% Slope or More
- High Sensitivity to Seismic Activity
- Current Historic District
- Shoreline (BCDC)
- Ridge Area
- Known Hazardous Waste: IR Sites and Category 5 and 6 Property Classification Parcels
- Archaeological Site
- Deteriorated Roadways
- Sensitive Vegetation
- Railroad Easement





Chevron is concerned that any development, but particularly residential, will lead to new residents demanding the curtailment of their operations or forcing the implementation of performance standards that may inhibit Chevron's ability to operate and/or expand into areas visible from Point Molate. It should be recognized that residential use at Point Molate, Point Richmond and elsewhere has co-existed since the beginning of the 1900s. The hillside open space designated in the Plan will act as a buffer between proposed Point Molate development and Chevron's nearby refinery and storage tanks.

## 1. Thematic Concepts

The land use plan is founded on a number of concepts that reflect the goals and objectives developed by BRAC (as described in Chapter I) and site opportunities and constraints (Figures 3 and 4). These are described as follows:

- a. Preservation of Historic Resources. Buildings listed in the National Register of Historic Places (NRHP) that can be economically upgraded and maintained to meet current building code and seismic requirements, and renovated to serve new uses without adversely affecting the historical integrity of the architecture, will be preserved. Buildings that are seismically and structurally unsound, and cannot be economically upgraded, will not be reused. It may be desirable to demolish one or more of these buildings to make room for new development.

Point Molate's historical period as a winery is preserved in its architectural character. The architecture of the main, three-story Winehaven building is unique to the Bay Area, if not to the country at large, for it resembles a Rhineland castle with its red brick crenelated parapet and corner turrets (Figure 5). Several additional concrete buildings also have crenelated parapets. The wood frame houses represent the turn-of-the-century period architectural style, with simple gable roofs, enclosed porches, brick chimneys, and wood floors. An area of approximately 71 acres, which includes these buildings, was listed in the National Register of Historic Places in 1978.

This historical period, represented by the remaining 35 buildings (Table 1), is the inspiration and theme for reuse at Point Molate. The two primary warehouse buildings are most suited for winery usage because their unique building construction ensures constant internal temperature and humidity, which minimizes operational costs. The reuse vision for Winehaven includes a single winery, or a consortium of winery interests that will use the facility to promote their own products (see Chapter II, Section B). The reuse vision emphasizes public visitation to the Winehaven building, support facilities, and to the site itself. The intent is to capture that portion of the tourism market directed at visitors who have time only to visit places of interest within the immediate Bay Area. In this way, the City will generate regional interest in the little known historical site and increase public access.

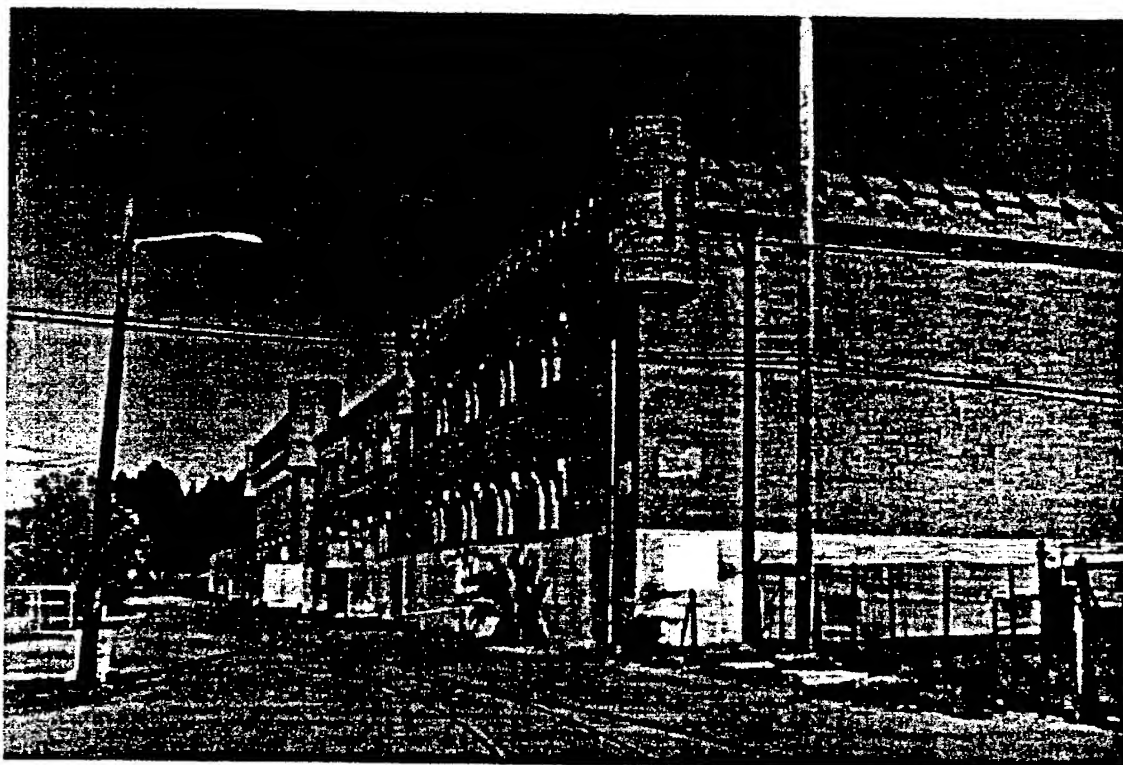


Figure 5:  
Photograph of Winehaven Close-up



POINT MOLATE REUSE PLAN  
City of Richmond

In addition to the winery era, other historical periods will be interpreted and reflected in reuse facilities and programs, but to a lesser extent. These include the early occupation of the site by Native Americans and Chinese shrimpers, and the post-winery Naval operation as a fuel depot.

b. Mixed Use Village. The winery will be supported and supplemented by a mix of other uses, not unlike the original rural village. The historical buildings (and the one contemporary building - Building 123 - that is in good condition) will be shared by a combination of winery, commercial entertainment, cultural, educational, and overnight uses. Recreational, residential, and special light industrial uses will be accommodated elsewhere on the site as new development. Any approved residential, recreational, and special light industrial uses will be accommodated elsewhere on the site as new development. If development of residential use is selected, it will be sited and designed to reinforce the village concept and complement public use of the site without creating a perception that Point Molate is privately owned. To reinforce the village concept and the existing architectural style and scale of development, new buildings will retain a small-scale, reinforcing the sense of a town with buildings sited along a main street, and in campus-like clusters determined by site topography and related use. New construction will be compatible with the existing architectural vernacular, and will "borrow" similar architectural features and materials.

c. Preservation of Open Space and Visual Resources. To provide local and regional recreational opportunities, attract visitors from around the Bay Area as well as from Richmond, protect the scenic quality of the site, and promote Point Molate as a western gateway to the City of Richmond, more than two-thirds of the site will be preserved as open space and parkland in the highly visible hillsides and along the 1.4-mile shoreline. Development will be limited to the low-lying, relatively level portions of the site. Most facilities and use areas will be oriented to the waterfront and views of the bay.

d. Promotion of Public Access and Use. A network of recreational trails will provide access to the undeveloped hillsides and will be linked to the Bay Trail and promenade along the shoreline. The 1,450-foot pier will be renovated to provide access by private boat and public ferry. Commercial recreation facilities will be allowed on and around the pier. A waterfront park with both interpretive and traditional facilities will be located at the base of the pier. Other outdoor visitor attractions may include a public plaza, amphitheater, and a publicly-oriented agricultural enterprise. Indoor attractions will include the winery and associated functions, a museum, a performing arts center, a restaurant and bar, retail, and retreat facilities.

- e. Attraction of Regional Interest. Early reuse of the site will focus on increasing public access to the site. This will establish regional visibility and help attract business interests from around the region which can provide more long-term financial support and jobs.
- f. Accommodation of Interim Use. The Plan takes into consideration near-term uses that will not preclude long-term use, and uses that will require minimal upgrading of buildings and infrastructure and may occur before full environmental clean-up is accomplished. Use of at least some of the existing buildings will likely occur before any new development if funding can be obtained to make them safe for occupation. Such uses should be attractive and enhance the marketability of the property for preferred long-term uses.
- g. Long-Term Economic Viability. The Plan attempts to balance low-cost, non-profit or low-revenue generating uses with those uses that can finance site-wide infrastructure improvements through sales and leasing. The timing of these two types of uses will be critical to the financial success of the project. It may be necessary to provide for some new development before all the existing buildings can be fully utilized in order to finance necessary infrastructure improvements.
- h. Job Training. Closure of NFD Point Molate did not create a significant loss in jobs. However, the City of Richmond does have a relatively high unemployment rate for the Bay Area. Therefore, one of the City's primary goals for the site is to provide for vocational training by encouraging businesses and educational institutions that will provide job training. In this way, the City hopes to help the unemployed.
- i. Market Flexibility. While some of the uses, such as the winery, are quite specific, others are more generalized so that the Plan can respond to changing market conditions over the next 20 years. The Plan also specifies alternative land use options in certain areas for even greater flexibility. Because redevelopment costs are largely unknown at this point in time, flexibility is especially important to ensure financial feasibility.
- j. Homeless Assistance. Relative to other bases around the Bay Area which have been or soon will be closed, Point Molate's supply of buildings for reuse is quite small. This is also the case for housing units, which will require the least amount of upgrading. Consequently, the demand for the existing cottages for a variety of purposes is competitive. Allocation of the housing units to the homeless is considered a low priority because Richmond already provides a relatively large share of this kind of assistance and because of the distance of Point Molate from the community services upon which the homeless depend. Any approved residential development will not be at the lower end of the market because of the high value waterfront location and the



need to offset the high cost of infrastructure improvements site-wide. However, a new residential development will fulfill a moderate to high end segment of the City's housing needs.

In summary, the Historic District is the central focus of Point Molate, providing the themes for reuse and the appearance of new development. It is in the village core of the Historic District and immediate surrounding area where use will be the most diverse, intensive, and public oriented. The historical village core will be supported by the Shoreline Park and hillside open space which will visually dominate the site. New development will be nestled amid the hills.

## **2. Land Use Overview**

Following is an overview of the Plan and how the goals and objectives established for Point Molate will be physically implemented.

For the purposes of the Plan, the site was divided into five distinct land use areas. These are shown in Figure 6 and include: the Core Historic District; the Northern Development Area; the Central Development Area; the Southern Development Area; and the Shoreline Park and Hillside Open Space Areas. It should be noted that part of the recently approved Historic District actually extends into the middle of the Northern Development Area. The conceptual land use plan is illustrated in Figures 7 through 9, and summarized in Table 2.

All but a few of the buildings at Point Molate are located within the Historic District. As shown in Table 2, 33 buildings in the proposed Core Historic District will be reused along with a small number of additional buildings in the Northern Development Area. In addition, several buildings along the shoreline may be reused including the sewer treatment plant that may be reactivated, buildings at the end of the pier that may be used in conjunction with park or commercial recreation use, and a quonset hut that may be used temporarily until the Southern Development Area is developed for either residential use or light industry. Historical Buildings 6 and 17 need further evaluation to determine whether or not they should be demolished. Remaining buildings and other structures on the site are proposed for demolition.



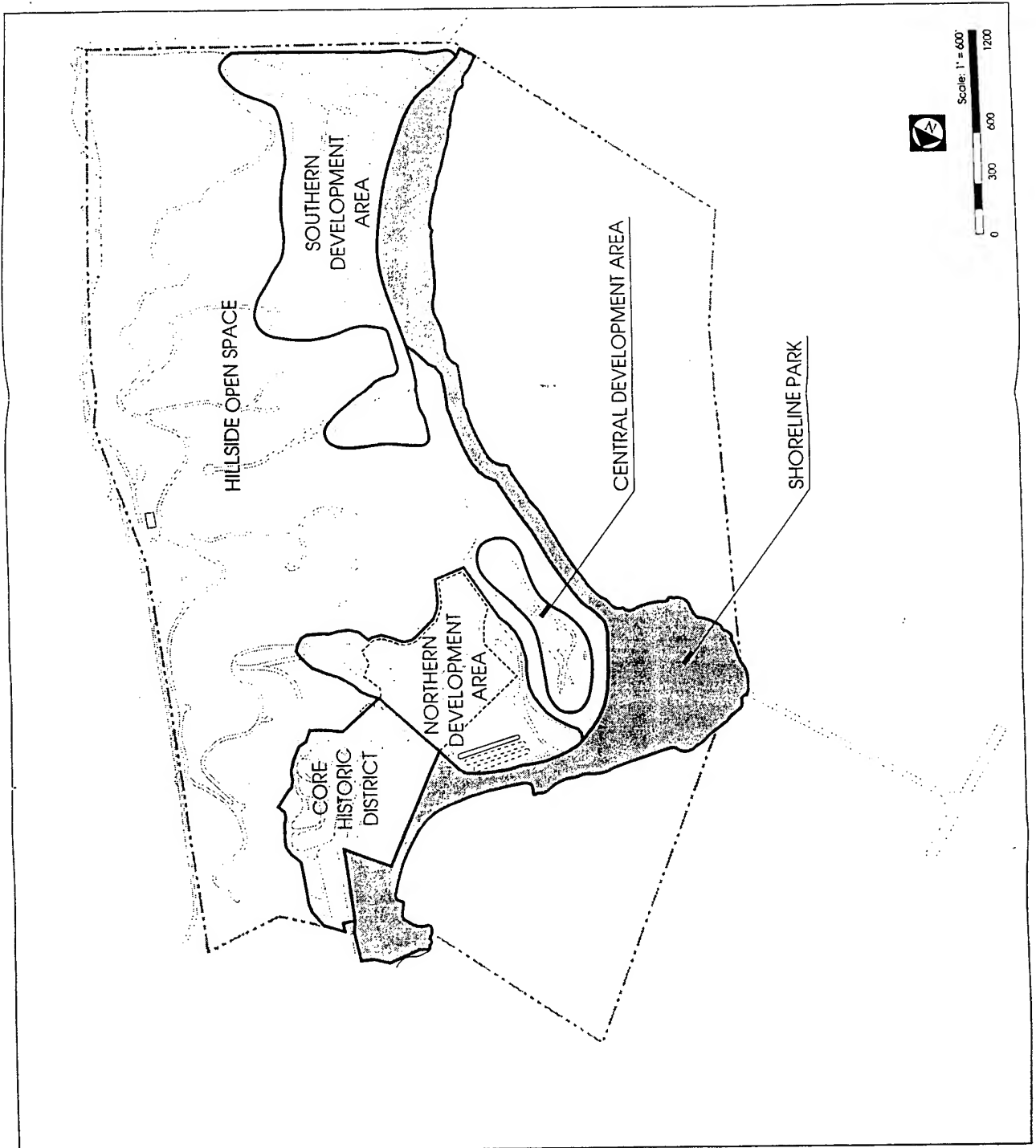
# POINT MOLATE REUSE PLAN City of Richmond



Figure 6:

Land Use Areas

- Development Area
- - - Historic District Boundary in Northern Development Area





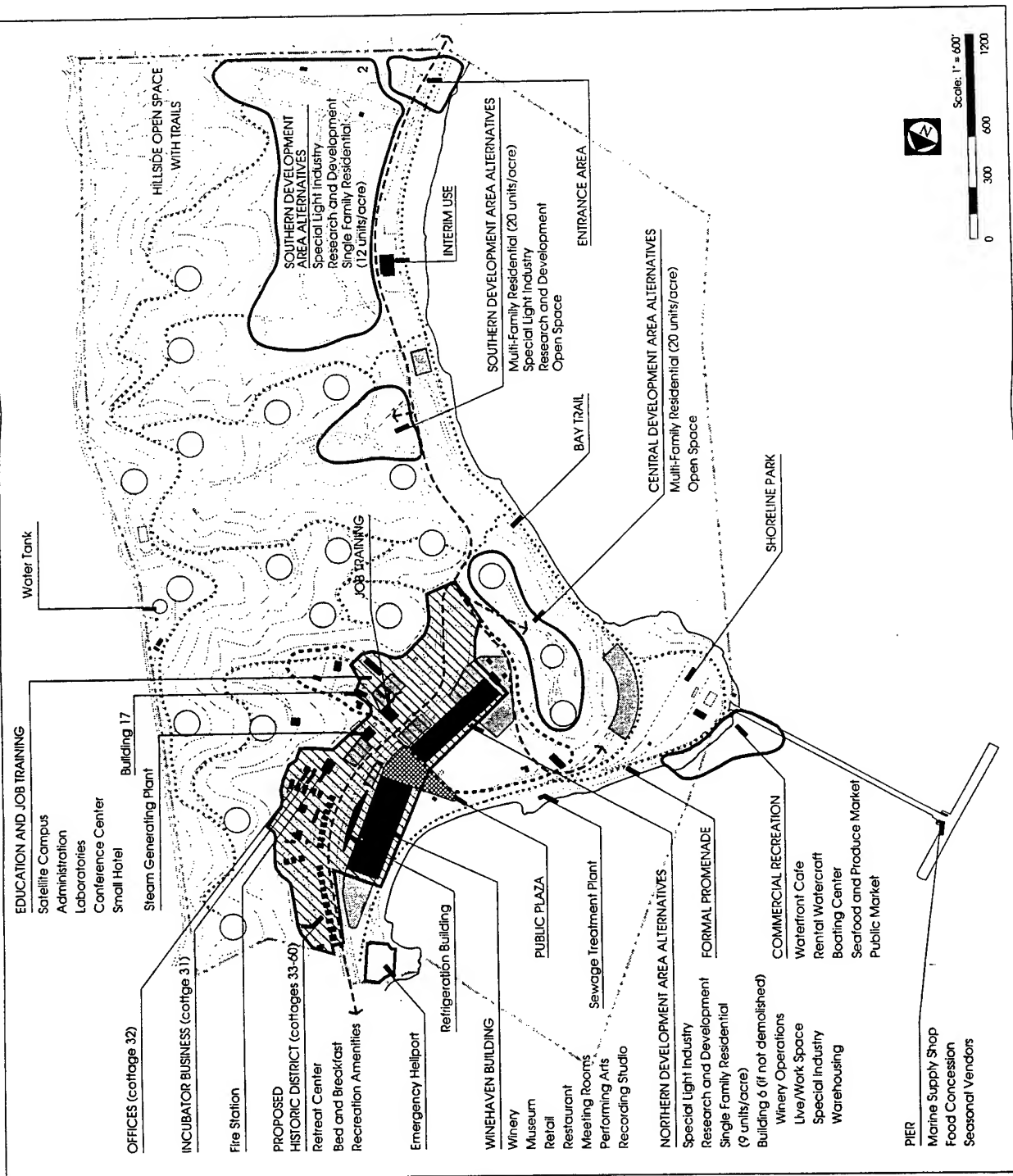
# POINT MOLATE REUSE PLAN City of Richmond

Figure 7:

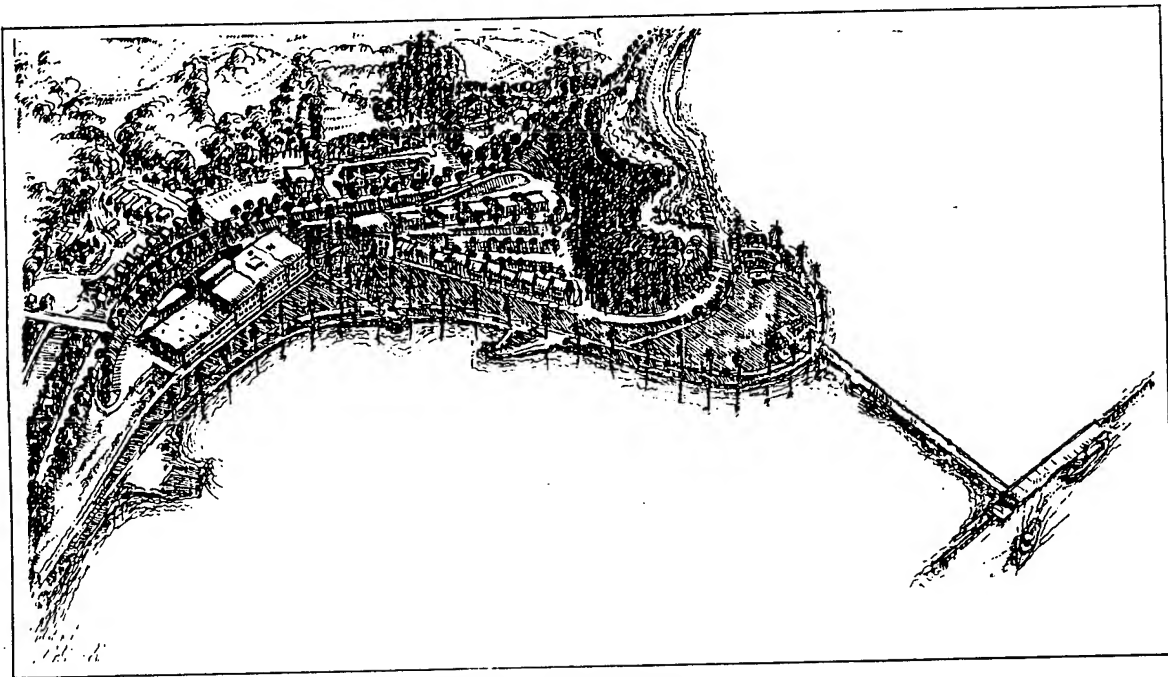
## Conceptual Land Use Plan

- Buildings to be Reused
- Proposed Parking
- Recommended Land Use
- Use of Area is Contingent on Building 6 Demolition
- Revised Historic District
- Roads to be Reused
- Proposed Trail
- Existing Underground Fuel Tank

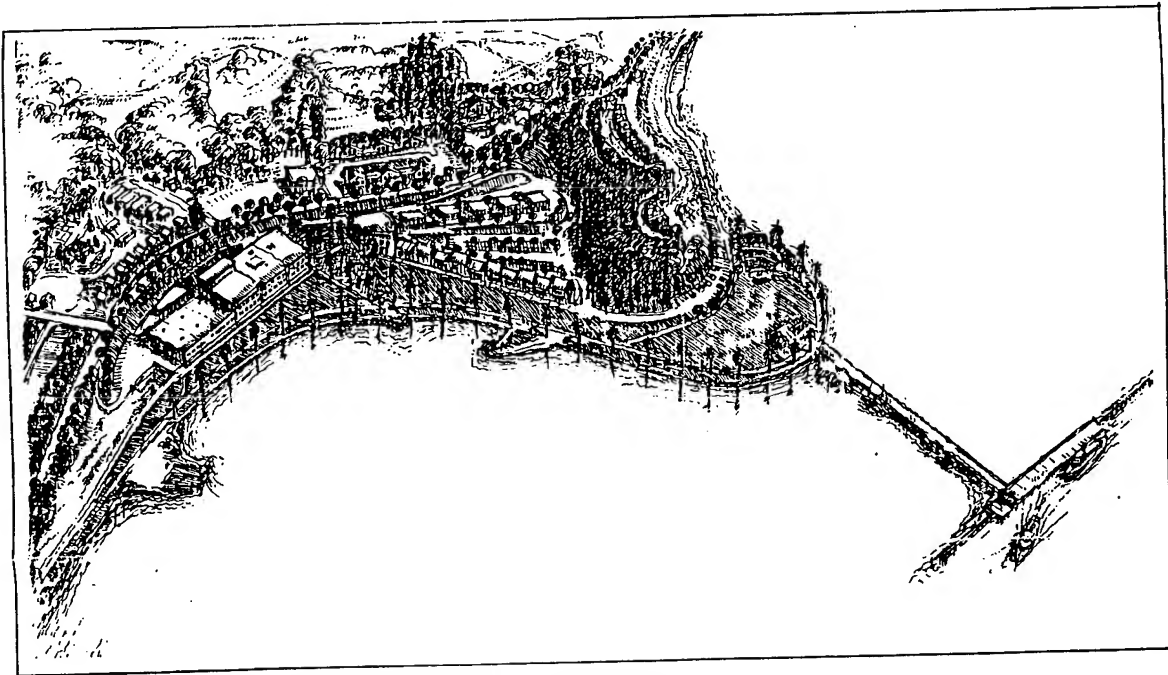
1. Alternative use assumes demolition of building 6.
2. Special use light industry is recommended over single family residential if building 6 is demolished and light industry is not accommodated around the building.







A. Open Space alternative in Northern Development Area. (Alternative 3)



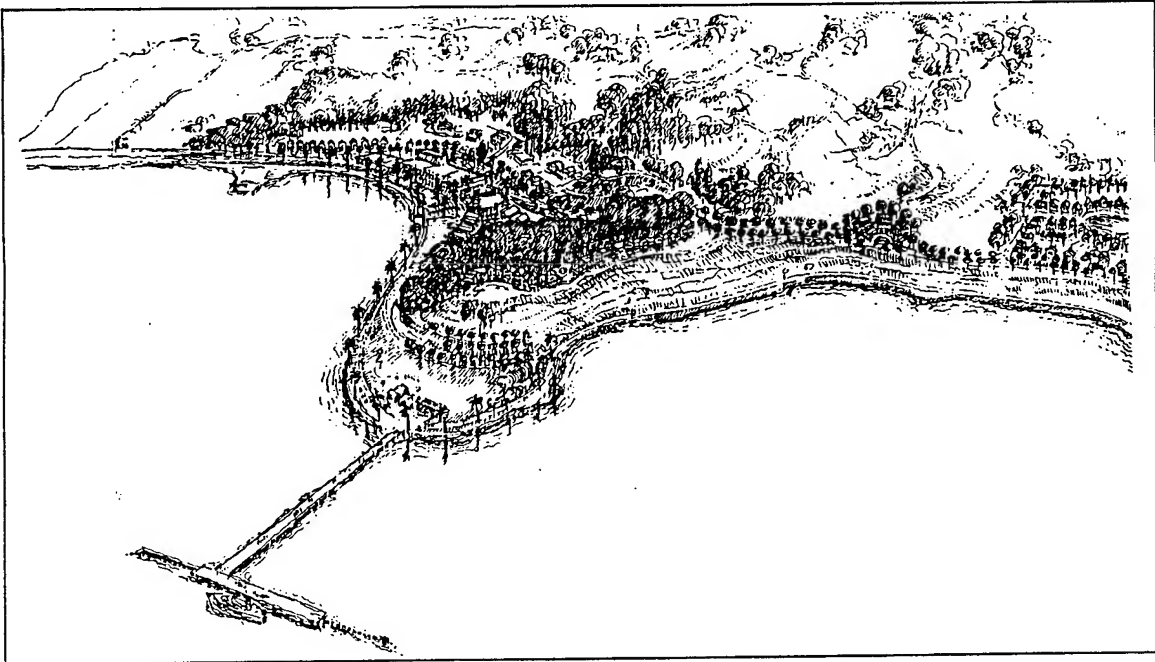
B. Residential alternative in Northern Development Area. (Alternative 1)

Figure 8:  
Bird's eye view looking southeast

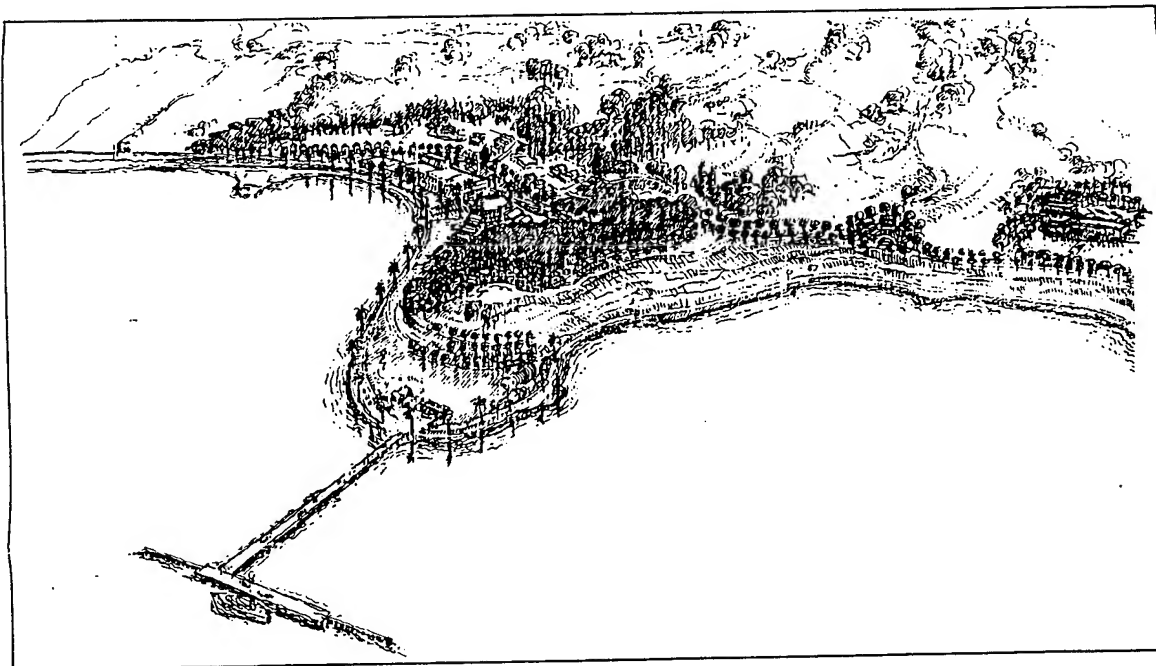
POINT MOLATE REUSE PLAN  
City of Richmond

BRADY AND ASSOCIATES  
PLANNING CONSULTANTS





A. Residential alternative in Southern Development Area. (Alternative 1)



B. Light Industry alternative in Southern Development Area. (Alternative 2)

Figure 9:  
Bird's eye view looking northeast



POINT MOLATE REUSE PLAN  
City of Richmond

BRADY AND ASSOCIATES  
PLANNERS AND ENVIRONMENTAL ARCHITECTS





Table 2  
LAND USE SPATIAL ALLOCATIONS

Area/Building	Proposed Uses	Potential Users/Developers	Acreage/SF	Density	# Units	Estimated Parking
<b>Historic District</b>						
Winehaven Building (1)	Winery Museum Retail Restaurant Meeting Rooms Performing Arts Recording Studio	Private Industry Non-Profit Organizations Private Industry Non-Profit Organization/Private Industry Non-Profit Organization/Private Industry Non-Profit Organization/Private Industry Private Industry	17 AC 198,885 SF			250
Cottage 31	Micropropagation	Orchidnet or similar Non-profit Organization	996 SF			7
Cottage 32	Office	Non-Profit Organization/Private Industry	996 SF			5
Cottages 33-59	Retreat Accommodations Bed and Breakfast Classrooms Labs Administration	City of Richmond Contra Costa College/West CCUSD	25,220 SF			45
Winemaster's Cottage (60)	Retreat Center Job Training	City of Richmond Contra Costa College/West CCUSD	2,097 SF			5
Fire Station	Fire Station	City of Richmond	4,236 SF			5
Steam Generating Plant (13)	Used Clothing Warehousing	Non-Profit Organization/Private Industry	5,067 SF			5
Refrigeration Building (10)	Micropropagation	Non-Profit Organization/Private Industry	18,864 SF			5
<b>Northern Development Area</b>			20 AC			
Administration Building (123)	Job Training	Non-Profit Organization/Private Industry	6,000 SF			15
Building 6*	Winery Live/Work Special Industry	Non-Profit Organization/Private Industry Non-Profit Organization/Private Industry Non-Profit Organization/Private Industry	116,196 SF			150
Building 17*	Warehousing	Non-Profit Organization/Private Industry	2,016 SF			
Miscellaneous Buildings	Job Training Light Industrial/Single Family	Non-Profit Organization/Private Industry Non-Profit Organization/Private Industry	9,064 SF 14 AC	9	126	50 NA

Table 2 continued

Area/Building	Proposed Uses	Potential Users/Developers	Acreage/SF	Density	# Units	Estimated Parking
<b>Central Development Area</b>						
	Multi-Family Residential/Open Space	Private Industry	6 AC	20	120	
<b>Southern Development Area</b>						
	Single Family Residential/Special Light Industry/R&D (Larger Parcel)	Private Industry	35 AC			
	Multi-Family Residential/Special Light Industry/R&D/Open Space (Smaller Parcel)	Private Industry	27 AC	12	324	
	Entrance Area	Private Industry	5 AC	20	100	
			3 AC			
<b>Open Space/Park</b>						
Hillside Open Space	Recreation	City of Richmond/EBRPD	191 AC			
Shoreline Open Space	Recreation	City of Richmond/EBRPD	156 AC			
Shoreline Park	Recreation	City of Richmond/EBRPD	14.4 AC			200
<b>Total</b>			20.9 AC			
			275 AC		670	742

\* May be demolished pending further investigation.

A maximum of 61 acres are designated for new development (assuming Building 6 is demolished). Several alternative land uses are proposed. One scenario would be to develop special use light industry in the Building 6 area and residential uses in the Central and Southern Development areas. If such an alternative were selected, a total of 544 residential units could be developed at the densities proposed. If a purely residential development was selected throughout the site, including Building 6, then as much as 670 residential units could be developed.

Whether or not residential development ultimately occurs is dependent upon: the policy decision of the City of Richmond to proceed with residential development on any of the suggested sites; the ability to provide sufficient infrastructure capacity to service any or all of the suggested residential units, and; the market for residential development at a price sufficient to address infrastructure and construction costs. If the EIS/EIR determines that housing is inappropriate for any reason, special light industry will serve as the preferred alternative.

New development can occur in the Northern, Central and Southern Development Areas. The Northern Development Area is comprised of part of the Historic District and additional areas to the west and east. Building construction would be allowed in the Northern Development Area portion of the Historic District but it would require sensitive siting and architectural design that is fully compatible with the existing historic buildings, and approval of the SHPO. The Central Development Area is located on a narrow bench approximately 150 feet above the middle portion of the shoreline. The Southern Development Area consists of two separate areas situated in low-lying terrain at the base of the hillside and generally east of Western Drive. There are no existing buildings in either the Central or Southern Development Areas. The Shoreline Park extends from the south end to the north end of the site, and includes the pier and the area below the Central Development Area. The remaining area, which is dominated by the west-facing slopes of the site, is classified as the Hillside Open Space Area. The boundaries of these areas will be refined over time as the Plan is implemented.

The sections below briefly describe the physical characteristics, proposed allowable uses, and general urban design guidelines applicable to each of the five main areas.

### **3. Core Historic District**

The following section discusses the existing and approved revision to the Historic District configuration; describes the historical buildings and reuse recommendation

and presents design and development guideline considerations for existing and new buildings.

a. Historic District Boundary. The current Historic District boundary was established in 1978. It follows the northern boundary of the site and is bounded on the east by a road that runs from the middle of Western Drive to near the ridge, on the south along the southern end of Building 6, and on the west along the shoreline. As currently defined, the Historic District is approximately 71 acres in size and contains 35 contributing (built between the years 1907 and 1919) buildings (1, 6, 10, 13, 17, 31 through 60, and 63), all of which are in "good to fair" condition except buildings 1, 10, 13, and 17, which are in "fair to poor" condition (PRC Environmental Management, Inc., 1996). There are 28 non-contributing structures including buildings, fuel tanks, and sewage treatment ponds (JRP Historical Consulting Services, 1996). The Historic District also includes a large portion of eucalyptus woodland.

JRP Historical Consulting Services recommended in their March 1996 report that the Historic District be reduced in size to about 27 acres. The intent was to increase the ratio of contributing to non-contributing elements from 55 percent to 76 percent without eliminating any historically significant buildings, and to reduce the overall land area (Figure 6). As of this writing, the State Historical Preservation Office (SHPO) has agreed with the boundary revision and has sent the matter forward to the National Park Service, keeper of the National Register, for approval.

Building 6, originally designed as a wine cellar and later renovated by the Navy for administrative use, is a two-story concrete structure with a total floor area of approximately 100,000 square feet (Figure 10). It has minimal architectural merit. Its structural condition was evaluated as "good to fair - except ceiling of lower warehouse partially collapsed from water damage" by Naval consultants (PRC Environmental Management, Inc., 1996). An independent analysis was performed by W. B. Clausen Structural Engineers for the City. In a letter dated June 6, 1996, the company stated that "The building has suffered major water damages to wooden roofs and floors. It is our opinion that costs to repair this building will exceed its value. This building should be demolished."

Whether or not this building should in fact be demolished may be dependent on the interest and financial capabilities of a potential user. Uses that may make it economical to save and reuse include wine storage and other warehousing, and possibly a special use light industry or live/work space. However, based on the structural analyses performed to date and on a preliminary market assessment of the

need for space in this building, demolition is recommended over preservation, especially the longer it stands empty. Demolition would be advantageous in that it would free additional land for new development needed to help finance improvements for reuse of the other historical buildings.

b. Historic District Buildings and Reuse Potential. As shown in Figure 7, the proposed Core Historic District would include 33 existing buildings: the Winehaven building; a steam generating plant; a refrigeration building, the Winemaster's house; 28 cottages; and a warehouse that serves as a fire station. It would also include six residential garages, a tennis court, and a children's playground, none of which are contributing features.

The historic core is nestled against the hillside just below the eucalyptus woodland. The Winemaster's house dominates this residential area from a high point (Figure 11). The cottages are arranged in an orderly, compact fashion on the hilly terrain along Western Drive and two secondary roads (Figure 12). They all have lawns. Most of residences are oriented to the waterfront and have dramatic views of Mount Tamalpais and the bay. The two-and-three bedroom, single-story, wood-frame houses have brown and gray-colored shingled roofs and an attractive two-color paint scheme: pale yellow above and marine gray below. They have contemporary interior features and wood floors that have been well-maintained. However, there are no concrete foundations, and the brick chimneys are not reinforced. The buildings would require structural/seismic improvements for reuse.

The individual cottages total 29,309 square feet. Because of their small sizes and overall density, they are less suitable for long-term residential use than for short-term accommodation. They are ideal as retreat center overnight facilities, a bed and breakfast, or similar use that is suited to the solitude and scenery of Point Molate. As retreat facilities, they could be used in conjunction with the Winehaven building or the proposed educational facilities. In support of a bed and breakfast business, the existing recreational amenities should be improved and additional ones, such as a swimming pool or outdoor jacuzzi could be considered. Either a retreat center or bed and breakfast could provide leisure service job training opportunities.

Buildings not needed for overnight use could be used for daytime activities that do not conflict with retreat or bed and breakfast usage. For example, they could be used for children's extended school programs, as artist work space, or as classrooms as part of a satellite college campus (see the Northern Development Area). Any sharing of space would help minimize improvement and operating expenses and foster collaboration. A detailed condition survey is needed to determine needed physical and

structural improvements and their costs. Conversion to overnight accommodations is expected to be relatively inexpensive and cost effective if the buildings are rented as units. Concerns about lead paint and possible asbestos contamination need to be further investigated and mitigated.

The flat-roofed, four-story Winehaven building (Figure 13), single-story refrigerator building, and steam generating plant are all unreinforced red brick buildings with crenelated parapets. The lower level of the main structure of the Winehaven building and the single-story addition at the north end are concrete. Other additions are constructed of sheet metal. The east side has a covered, elevated wooden loading dock. The fire station, another historical building is constructed of concrete. Neither the steam generating plant nor the refrigeration building is a functioning building, but both are spacious. The fire station is still operational.

The Winehaven building offers 198,865 square feet of space, but is somewhat limited for reuse by numerous metal and wood supports. There are specialized elevators and interior stairs at both ends of the building. Only the western wall has windows, and these are small. The exterior walls are thick and insulating. The building is unheated.

As discussed previously, the Winehaven building is most suitable as a "winery", the purpose for which it was originally designed, or for any use that requires minimal modification of the building facade and that could take advantage of the internal consistency in temperature and humidity, low levels of natural light, and noise insulation.

Three types of winery options exist for this building: as an independent facility under one ownership or lease, as a satellite facility to a larger winery located outside of the immediate Bay Area, or as a consortium of winery interests who individually lease space in the building. Under any of these scenarios, grapes could be shipped in and crushed on-site, or crushed off-site and the wine simply stored and distributed wholesale from the site. It is anticipated that the lower level of the building would be used for wine storage, while a portion of the upper levels would be used for a wine shop, wine tasting room, restaurant, and bar. This would leave much of the building available for other complementary and compatible uses such as a museum, museum store, other retail businesses, performing arts center, meeting rooms, and similar public oriented uses with entertainment or educational purposes. A small grocery store or cafe should be considered in the Winehaven building or elsewhere in the village center in support of local residents and visitors. All building levels would be suitable as a repository for museum artifacts or as a governmental archive. If grape

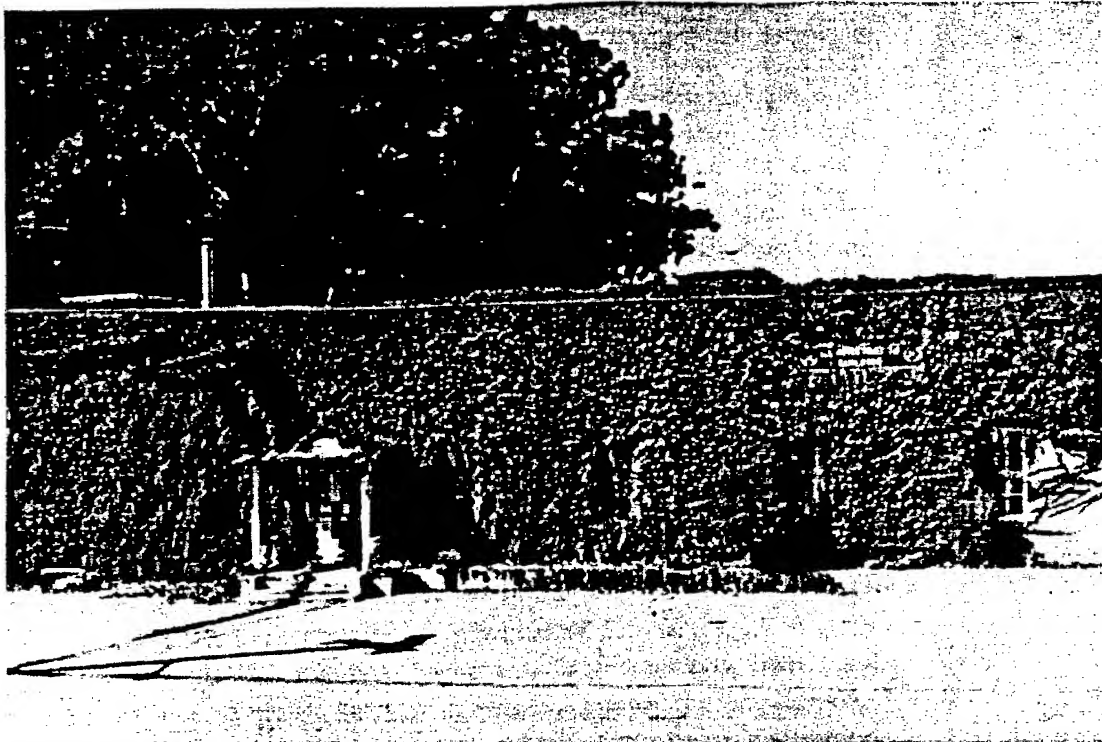


Figure10: Photograph of Building 6



Figure 11: Winemaster's House

Figures 10 & 11:  
 Photograph of Building 6  
 Photograph of Winemaster's House



POINT MOLATE REUSE PLAN  
 City of Richmond

BRADY AND ASSOCIATES  
 CONSULTING ENGINEERS



Figure 12: Photograph of Cottages

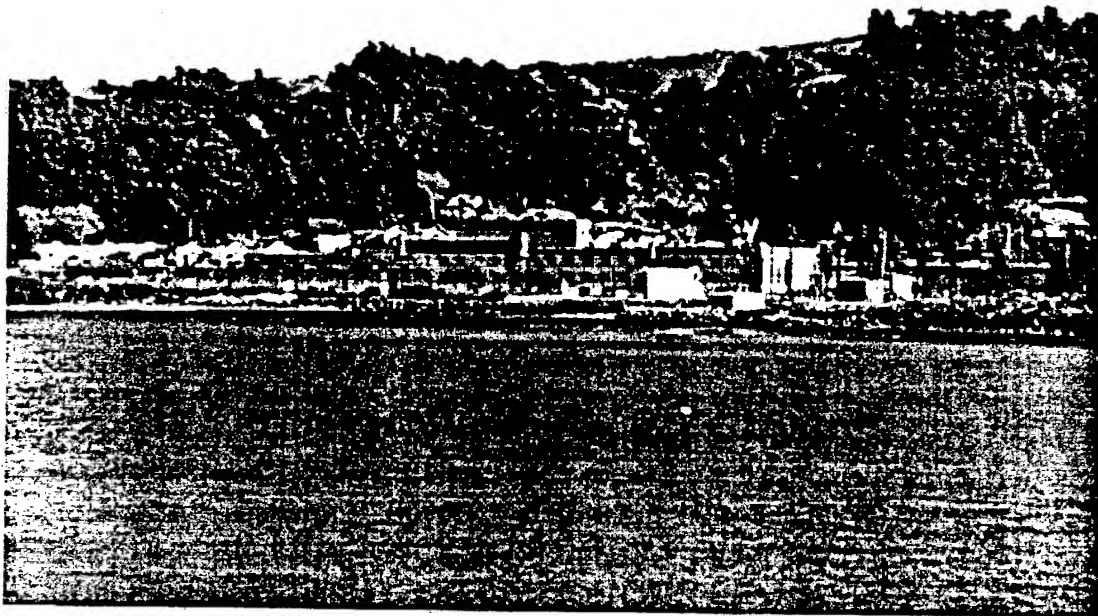


Figure 13: Photograph of Winehaven from Pier

Figures 12 & 13:  
 Photograph of Cottages  
 Photograph of Winehaven from Pier



POINT MOLATE REUSE PLAN  
 City of Richmond



crushing operations occur on-site, it is recommended that such use be conducted in Building 6, if it is not demolished. The significance of potential impacts (e.g., noise, odors and infrastructure requirements) of this industrial aspect of the winery would need to be assessed.

Programs associated with the Winehaven building may include guided public tours, elementary and secondary school outreach, demonstrations, lectures, and research.

The refrigeration building and steam generating plant could be used in support of these uses or they may be converted for use by Orchidnet, a non-profit organization that propagates endangered orchids and has requested space at Point Molate. It is recommended that the fire station continue to function in this capacity.

c. Historic District Design and Development Considerations. No new building construction should be allowed in the core portion of the Historic District. New buildings in the southern portion of the district should be sited and designed as described in the following section. Non-historical site features such as fences should be removed. Overhead power lines and other above ground utilities should be buried. Consideration should be given to the removal of non-native shrubs and trees in the residential area, except for the historic grove of eucalyptus near the winemaster's house, which were planted there during the presence of the winery.

Parking for the Winehaven building should be located to the north side of the building, across Western Drive between the fire station and steam generation plant, and if necessary, at the front of the building. The area between the parking lot and Building 6 should be developed into a public plaza with brick and concrete paving and formal landscaping, possibly using palm trees transplanted from elsewhere on the site, or native trees such as oak, bay, or walnut. An historical feature or environmental art piece could be placed at the focal point near the waterfront. The plaza, as shown in Figures 7 and 8, could expand in an eastern direction between the two buildings, with views of the steam generation plant and wooded hillside beyond. Formal gardens could be established between the west wall of Winehaven and the waterfront for outdoor dining and special events like weddings.

The renovation of historic buildings will be subject to the review and approval of the SHPO. Highly visible modifications such as large windows are not likely to be approved, whereas skylights are allowable. All historic buildings, especially Winehaven, will require extensive renovation to meet structural, mechanical, electrical, and Americans with Disabilities Act (ADA) codes, to create individual tenant spaces and to improve building access, interior circulation, natural ventilation,

and natural lighting. Building 6 is more adaptable to remodeling than Winehaven, but the latter has much greater architectural significance. Historic District grounds may require improved and/or expanded vehicular circulation and parking, and landscaping (Figure 14). Although the landscape in the Historic District can be renovated and upgraded, elements of the original site plan, including roads, sidewalks, plantings, and outbuildings, must not be substantially altered. Also, the relocation of buildings would not likely be approved.

#### 4. Northern Development Area

This is one of the three general areas of the site designated for new development. Following is a description of the area, recommended land uses, and design and development considerations.

a. Description of Area. The southern portion of the Historic District, where Building 6 is located is in the heart of the Northern Development Area (10.5 acres). Other areas designated for new development include an upper valley to the east (2.5 acres) and the treatment pond area to the west (7 acres, for a total of 20 acres).

Topographically, the area lies within the same enclave as the core Historic District located to the north. The area is bounded on the east and south by hills and eucalyptus woodland, and the bay on the west. Western Drive and Building 6 divide the area in half. The eastern half is slightly elevated above the western half, most, if not all of which, is bay mud fill. A substantial portion of the area is covered with asphalt.

The western area is visually prominent and dominated by the sewage treatment ponds, which are planned for removal as part of the Navy's Installation Restoration Program to clean up the site. There are several small Naval buildings that were used in association with the sanitary sewer and water systems, and two small fuel tanks. Most of the grounds are disturbed grassland.

The eastern area is hidden in the upper end of a small valley and surrounded by trees. An old paint shop and vehicle wash are still standing. About half of the area is asphalt covered. The middle portion contains historical Buildings 6 and 17, as described above. There are also several small Naval buildings, most notably Building 123, which is currently used as office space and is in good condition. These buildings are scattered around the valley. On a hill to the south, there remains the foundation of a hotel that existed during the Winehaven period.



Figure 14:  
Sketch of Historic District Streetscape



POINT MOLATE REUSE PLAN  
City of Richmond

b. Proposed Allowable Uses. The area to the east of Western Drive is proposed for educational and job training purposes. This area could be used as a satellite college campus with individual buildings serving as classrooms, laboratories, shops, administrative offices, and other related facilities. In support of the educational function, this area could also provide retreat facilities, including a conference center or small hotel on the old hotel site. Small scale research could be accommodated in this area, as well as "back office" tenants. A small outdoor amphitheater oriented along a sightline over the public plaza could be located at the back edge of this area where outdoor educational programs could be conducted. Nearby fuel tanks located further up the hillside could be used as campsites for a children's environmental camp program, once properly cleaned and sealed.

As discussed above, if not demolished, Building 6 could be used as part of the winery operation or for other warehousing purposes. If financially feasible, it could be used as light industrial space, preferably "knowledge based" and environmentally "clean". Building 6 could also be included under the educational/job training theme whereby uses proposed to the east of Western Drive could also be accommodated in this building.

The area between Building 6 and the shoreline could be developed for additional, similar light industrial or educational use (with filling of the treatment ponds and full environmental clean-up). Industrial users would be specialized companies who would benefit from or at least be appreciative of the remote, waterfront location, and who would have sufficient up-front capital to invest in site-wide infrastructure and building improvements.

Industrial uses should be consistent with M-1 Industrial/Office Flex District permitted and conditional uses in the Zoning Ordinance, with the exception of: auto parking/repairs; surface and bulk sales distribution; and the manufacturing of chemical and allied products. The remote location, sensitive environmental conditions and limited road access are not compatible with these uses. Permitted uses would include light manufacturing, light assembly, research, product development and testing, engineering and sales development, other research functions leading to new product development and marketing, publishing, printing, and small distribution facilities using small delivery trucks. Manufacturing activities are limited to non-nuisance light manufacturing and assembly, and pilot plant operations for manufacturing and testing of prototype products. Commercial offices including corporate headquarters could be found within this category. Retail uses are generally limited to those providing support services or which are regional serving and sell in bulk warehouse quantities. It is assumed that Industrial/Office Flex uses will have

warehouse-like buildings with over 10 percent of their floor space devoted to office uses. Types of uses that would be found within this category include: laboratories, biotechnology and high-technology uses, light assembly, retail-warehouses, limited warehousing, and comparable types of uses.

Light industrial uses may be permitted including warehousing, distribution centers, commercial nurseries, support retail/service and related establishments which have limited external impact on the surrounding area. It is assumed that these uses will be controlled to ensure compatibility between the industrial operations and other uses in the area. Light Industry sites may have warehouse-like buildings with less than 10 percent office space.

If Building 6 is demolished, it is recommended that all of the area west of Western Drive (14 acres) be converted to light industrial use if an appropriate user can be found. Otherwise, it should be developed for residential use. Either type of use will generate some of the financing needed to renovate the existing historical buildings to allow for their reuse by tenants who typically do not have large amounts of investment funds. Residential use would have the advantage of creating a greater sense of community and 24-hour presence on the site. Currently, residential development is the highest market demand at Point Molate. It is estimated that approximately 126 homes could be constructed in this area at a density of nine units per acre. In this alternative, environmental remediation would have to meet residential standards, which are the highest standards.

c. Design and Development Considerations. New buildings should be located along Western Drive, with parking in the rear, to serve the entire complex of buildings in this area. Buildings should be small and arranged on the site similarly to the cottages: orderly, with similar setbacks along Western Drive and secondary roads. They should incorporate red bricks in the facades or be painted the same colors as the cottages, and should have flat or shingled hip roofs, and small windows. They should be no higher than three stories. The remainder of the grounds should be landscaped open space with pavement limited to walkways connecting the various buildings.

The portion west of Western Drive is highly visible from the shoreline, hillsides, and Historic District. For this reason, building arrangement on the site, architectural design, and roof treatments should be carefully and sensitively planned (see Figure 8 as an example of how buildings could be arranged on the site). If Building 6 remains, additional parking may be needed. Parking should be located where it would be least visible from the Winehaven building.

If new housing is developed, it should respect the design and layout of the existing historical village. Residential development should be medium-density single-family homes (nine units per acre), similar to the density of the cottages. Houses should be limited to two stories with a maximum floor area typical of urban housing. The architectural design and exterior color palette should resemble that of the cottages. Streets should be narrow, with no on-street parking allowed. Separate garages sited behind residences should be encouraged over integration into the main structures. There should be a landscape transition between the residential area and adjacent public spaces.

## **5. Central Development Area**

The Central Development Area is one of the three general areas of the site that could receive new development. Proposed land use, and design and development considerations are described below.

a. **Description of Area.** Located in the central western portion of the Point Molate site, this narrow, flat six-acre area is physically isolated by steep terrain approximately 160 feet above the surrounding area. It is reached from the north by a secondary road off Western Drive. There are three fuel tanks but no buildings. Views to the northeast are enclosed by woodland; views to the southwest extend across the bay to Marin and San Francisco. Vegetation on the bench is predominantly disturbed grassland with remnants of coastal scrub. There may be sensitive plant and animal species on the bluffs around the area.

b. **Proposed Allowable Uses.** Because of its isolation and dramatic views, this area is appropriate for high end residential use, or, should remain as open space. If the high end residential use is selected, a low rise, multi-family complex of condominiums or townhouses is proposed at 20 units per gross acre. This would allow approximately 120 units. This density falls within the current General Plan designation of High Density Residential (21 to 43 units/net acre) and the Zoning Ordinance designation of MFR-2 Multi-Family, under which the minimum lot size is 5,000 square feet, and the lot area may be no less than 1,200 square feet per dwelling unit.

Because this area is highly visible from off-shore, supports habitats unique to the region, and may support sensitive plant and animal species, its maintenance as open space would be appropriate. If housing development were pursued in this area, it should occur only if needed to support full implementation of the plan and specifically to support development of single-family housing in the Southern Development area.

If housing is developed, it should be designed/sited to avoid impacts to California Native Plant Society-listed plant species.

c. Design and Development Considerations. There are a number of options for building configuration and siting, but the recommendation is two individual buildings that are separated where the access road reaches the top of the bench. Each building complex should be oriented toward the water, with parking at the back. Another set of buildings could be constructed on the other side of the parking lots, if buildings extend to or just over the rim of the hill. No more than three stories should be allowed to keep the housing in scale with existing development, and to minimize visual impacts. The building design and materials do not need to match those of the historical buildings, but should be complementary in form, color, and architectural details.

## 6. Southern Development Area

The Southern Development Area consists of several independent areas that are located in close proximity to each other. These are the last of the three general areas of the site that should be developed. A description of the area, the allowable land uses, and design and development considerations follow.

a. Description of Area. The south end of Point Molate is the entrance to the site and therefore the first area to be seen as one approaches on Western Drive. For this reason, the appearance of development in this area is particularly important, as it will establish the overall image of the Point Molate site.

The area which is first visible as one approaches Point Molate lies across Western Drive from the entrance to the existing City-leased park. The area has been excavated into a hill for parking. A variety of fences are located in the area. A small area has been landscaped around a "Point Molate Village" sign.

Beyond this is a gently sloping area approximately 27 acres in size that extends from the Western Drive east to the base of the hillside. Nearly the entire area is paved.

Further north, east of Western Drive, there is another level area that measures approximately four acres. A number of roads cross this area, leading to the Naval waste disposal site and fuel tanks in the hills. Vegetation cover is a mixture of native and non-native of grasses and shrubs.

- b. Proposed Allowable Uses. The entrance area should receive special treatment (as described below) to serve as a gateway to Point Molate.

It is proposed that the larger of the two level areas be developed for either Special Light Industry, Research and Development uses or, Single-Family residential use at a density of up to 12 units per acre (in keeping with the existing residential density of 9 units per acre for the cottages). Under this formula, this density would yield 324 homes. The corresponding General Plan designation is Medium Density Residential (9 to 21 units/net acre) and the Zoning Ordinance designation is MFR-1 Multi-Family, which allows single-family residences on lots no less than 5,000 square feet in size and specifies 1,650 square feet of lot per dwelling unit. However, if Building 6 is demolished and residential development occurs in the Northern Development Area, it is alternatively recommended that this area be reserved for light industrial use or research and development, rather than additional housing. Industrial use is also recommended if it is determined in the EIS/EIR that housing is not an appropriate use. Light industrial use would be fully compatible with M-1 zoning as described for the Northern Development Area. When developed, it may be desirable to relocate Western Drive slightly west, closer to the 100-foot BCDC setback from the high water line.

Either Special Light Industry, Research and Development, Open Space or Residential uses are proposed for the smaller level area. The multi-family residential use would, be at 20 units per gross acre is proposed (as defined in the General Plan as High Density Residential). Under this formula, this density would yield 100 residential units. The old waste disposal site, which includes this area, has been identified as one of the most contaminated areas at Point Molate. Any use in this area, and particularly residential use, will not be able to occur until it can be assured that all potential toxins have been completely removed or otherwise mitigated. It is recommended that this area be developed last and only if needed to financially support other aspects of the Plan.

- c. Design and Development Considerations. Similar to the Central Development Area, the architectural style of the housing should be complementary with the historical architecture, especially since it will establish an image of Point Molate, being near the entrance to the site. Unlike housing near the Historic District, parking could be allowed on the streets and in integrated garages. However, to achieve the desired high density, housing should be arranged in a tight cluster, streets should be kept narrow, and setbacks small. The maximum height allowed should be equivalent to two stories. This arrangement would be compatible with the residential layout of the Historic District.



If light industrial use is pursued, buildings should not be massive or have large blank walls, but should appear more like typical office and commercial buildings. Parking should be located against the hillside or to the sides, preferably in several small lots rather than in one large one, to minimize visibility from Western Drive. Landscaping should be liberally employed to help screen unsightly features and further reduce the visibility of buildings.

The smaller residential site could be creatively developed by stepping the multi-family housing up the slopes. Parking could be provided at ground level or off to the sides or rear of the development.

The Chinese Shrimp Camp is believed to extend from the shoreline past Western Drive to the east (Figure 4). Prior to excavation of the site for development, a full evaluation must be completed to determine the potential for the site to be recorded on the NRHP. If the site is found to be not eligible, the site may be excavated with the supervision of a monitoring archaeologist and artifacts found used for an on-site museum. If the site is found to be eligible for the NRHP, avoidance of historic resources is recommended by the SHPO.

## **7. Open Space, Parks, and Public Access**

Point Molate is one of the few places on the San Francisco Bay where undeveloped hillside interfaces directly with the waterfront. This high quality open space should be both preserved and used to its full advantage.

The framework for the Plan is the open space, which connects all the development areas with pedestrian linkages and serves to protect an important public resource for recreation and appreciation of the site's natural qualities (Figure 15).





a. Description of Area. Open space is provided along the shoreline and throughout the west facing hillside. The proposed Shoreline Park, approximately 40 acres in size, is a strip at least 100 feet in width running along the entire length of the waterfront, a total of 1.4 miles. There are several buildings within the shoreline area, as previously described. At the south end is the City-leased park (Figure 16). It has aging recreation facilities and a beach. At the north end is an emergency heliport.

All terrain exceeding a 15 percent slope is categorized as Hillside Open Space. In the central portion of the site, the Shoreline Park and Hillside Open Space adjoin one another. There are 19 underground fuel tanks, above and below ground fuel pipelines, and two elevated water tanks in the hillside area (Figure 5-2 in Appendix



# POINT MOLATE REUSE PLAN City of Richmond

Figure 15:  
Conceptual Open Space Plan

-  Formal Plaza Areas
-  Viewpoint Facilities
-  Bay Trail and Promenade
-  Tree-Lined Streets / Promenade

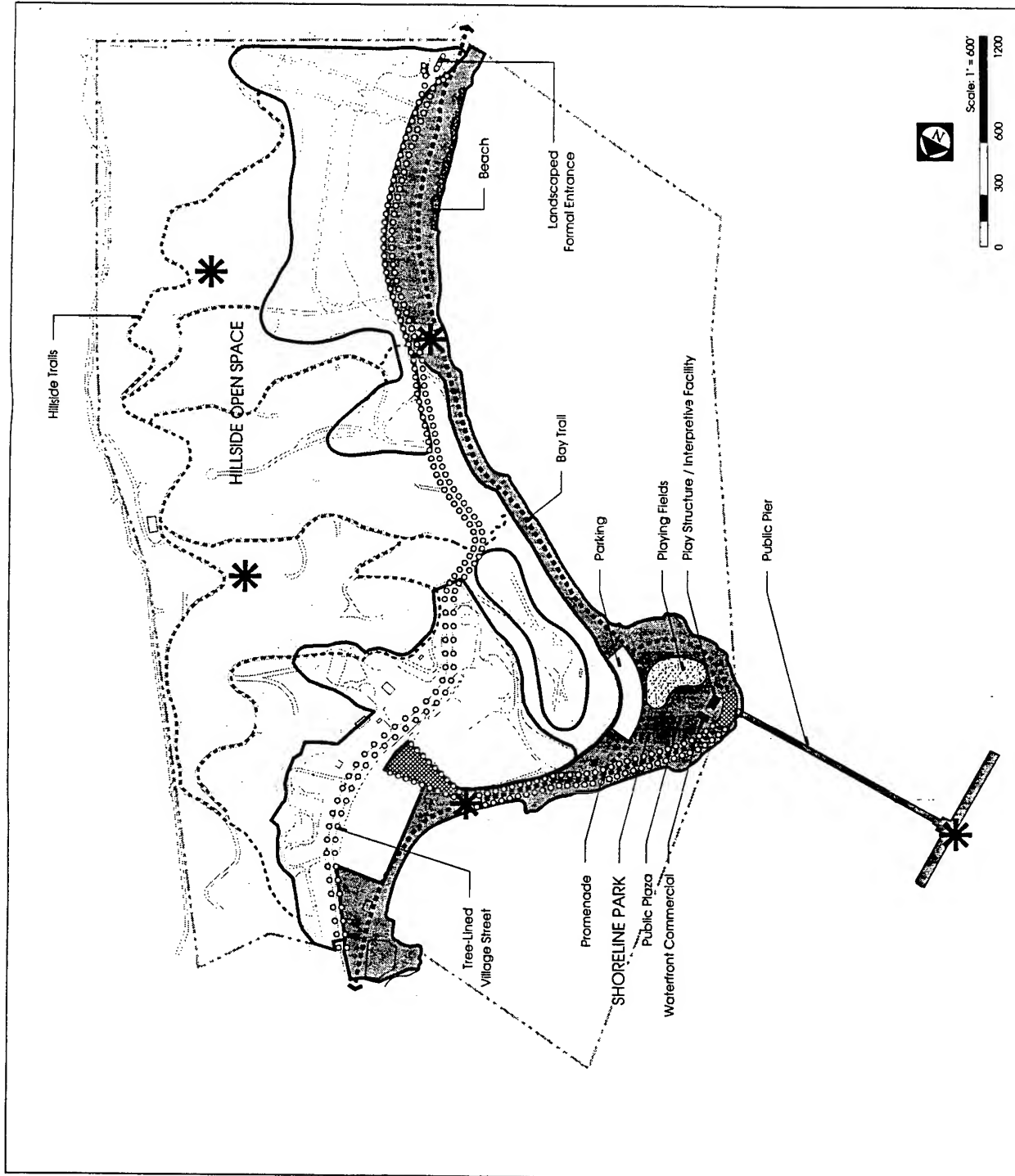




Figure 16: Photograph of Existing Shoreline Park



Figure 17: Photograph of Hillside Open Space

Figures 16 & 17:  
 Photograph of Existing Shoreline park  
 Photograph of Hillside Open Space



POINT MOLATE REUSE PLAN  
 City of Richmond



Figure 18: Photograph of Pier Close-up

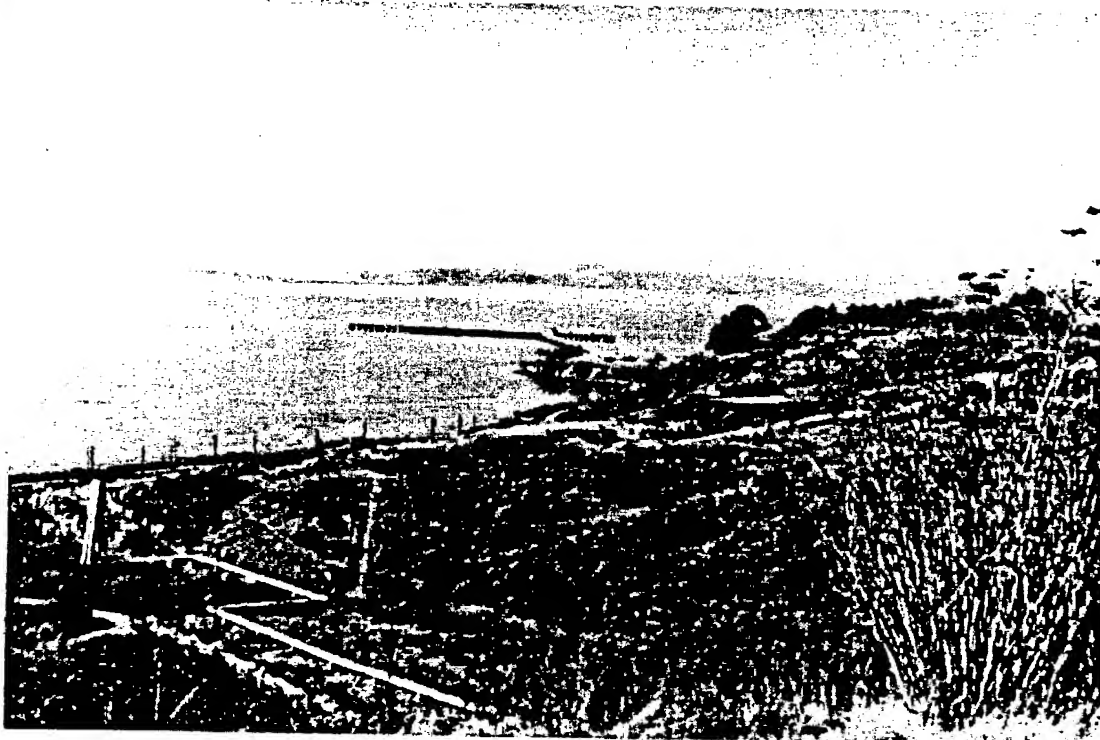


Figure 19: Photograph of Pier from Hillside

Figures 18 & 19:  
 Photograph of Pier Close-up  
 Photograph of Pier from Hillside



POINT MOLATE REUSE PLAN  
 City of Richmond

BRADY AND ASSOCIATES  
 PLANNING AND DESIGN

B), as well as numerous steep and narrow roads that are in poor condition (Figure 17).

At the base of the pier (Figures 18 and 19) is a broad, flat, paved area bordered along the south side by a low, excavated hill. The area is ideal for more intensive park uses and commercial recreation facilities because of its central location on the shoreline, proximity to the pier, and site characteristics. Of the four buildings in this area, two may be usable.

There is another building, a Navy quonset "hut" on the shore side of Western Drive near the existing park. It was once used as a laboratory. To the south of the building is a large parking lot for the park.

All together these areas cover approximately 190.8 acres.

b. Proposed Allowable Uses. A trail is recommended along the shoreline which will eventually be incorporated into a Bay Trail extension from the Richmond-San Rafael Bridge northward. This extension is provided for in the EBRPD Master Plan, the Bay Trail Plan adopted by ABAG, the San Francisco Bay Plan adopted by BCDC, and the Richmond General Plan.

A significant portion of this trail is already in place where a road parallels the shoreline, beginning just north of the quonset hut and continuing to a point near the Winehaven building. At the south end of Point Molate, the Bay Trail could follow the edge of the existing Shoreline Park parking lot, or be developed along the railroad right-of-way. The trails would provide opportunities for walking, bicycling, and rollerblading. A secondary trail is proposed on the top of an existing elevated berm through the park.

Trails are also proposed throughout the hillside along existing roadways for hiking. These connect with the various development areas and Shoreline Park. Some of the tank sites near the Historic District and Northern Development Area could be used for group camping once their condition is evaluated and proper steps are taken to remove any hazards. Agricultural use of the open space should also be encouraged, if the soils and climate are suitable. Potential agricultural uses include a demonstration vineyard, fruit orchard, and Christmas tree farm, and are permissible where there are no known unique habitat areas, or habitats for sensitive plants or animals.

The existing City park would be absorbed into the larger Shoreline Park. The portion proposed at the end of the end of the pier could potentially include some traditional facilities such as playfields, picnic areas, and children's play equipment. In addition,

there could be an amphitheater for concerts and other special events here or in the hillside open space in association with the winery or college. A significant portion of the pavement could be preserved for large public gatherings uses such as a weekly fresh seafood/produce market or flea market, and infrequent events like art fairs and carnivals. Parking is planned around the bottom of the slope, hidden from the rest of the park by the raised berm.

The park would have an interpretive component. A number of historical features could be located within the park, including a railroad car once used to haul in grapes, wine making machinery, and a model of the old Chinese Shrimp Camp or artifacts from the camp. Once cleaned, a maze of oil pipes colorfully painted in yellow and purple could serve to interpret the Naval fuel supply period and be used as a children's play structure. In addition, an existing coastal bluff plant community could serve as an educational feature. Based on Richmond's history of shipbuilding, the USS Red Oak Victory ship could be docked at the pier, if it is determined to be appropriate and economically viable.

Building 132, which was used as part of oil operations, has 2,688 square feet of space, is in good condition, and may be reused in support of the park or commercial recreation. Building 89 was used as a drum storage shed and could be used as a park shelter. However, due to its unattractiveness and potential contamination it is recommended for demolition, rather than reuse as a shelter. The quonset hut could be used temporarily, until the area is developed for residential or industrial use.

In support of this Plan, the City intends to promote ferry and private boat access to Point Molate. To encourage tourists and other visitors to walk the distance from the pier to the Winehaven building, a promenade linking the pier and the public plaza is proposed. Certain commercial recreation facilities would be allowed on the pier and adjacent to the promenade and park. These would be managed by the City or other entity as leases. Such uses may include a "bait and tackle" or similar type of marine/sports supply shop; a "crab shack", waterfront cafe, or other kind of food concession; public restrooms; and a public recreation center, watercraft rental shop, boating center or school and other marine-related facilities. While a waterfront hotel is not proposed, it should be considered as an allowable use depending upon market demand at the time of Plan implementation. Public use of the dock will be encouraged. A private marina could be considered if the demand for one should increase in the future. In this case, a breakwater would be needed. However, transient mooring should be accommodated at the pier, off-shore buoys, and possibly a number of floating docks. Ramps would be needed to facilitate access from boats to the top of the pier. Long-term mooring of large vessels at the pier could be made available to help meet a current bay-wide need, assuming no dredging is required.

The public plaza and formal gardens described under the Historic District section would extend slightly into the Shoreline Park.

c. Design and Development Considerations. Residual pavement along the shoreline should be removed, along with any other unattractive site features such as fuel pipes, fences, overhead power lines, recreation facilities in disrepair, and eventually the quonset hut. Paved, graveled, and disturbed vegetative areas should be rehabilitated and planted with native species. Unstable cut slopes should be stabilized and seeded where practical. Where slopes are stabilized and seeded, native plants should be used. Trees along the entire length of the shoreline could be considered to help establish a special identity for Point Molate, as seen from the water and Richmond-San Rafael Bridge.

The Bay Trail should be located to help separate the Shoreline Park from any proposed non-recreational land uses. Developers should be required to install attractive fencing to further partition private property from public land.

In the Hillside Open Space, unsightly features and aboveground pipelines should be removed to the extent practical. If the Navy fails to remove the above ground pipelines, they should be painted a color that blends in with the landscape. Prior to removal, the potential for impacting sensitive species needs to be evaluated. The tops of the fuel tanks should be seeded with native grasses and the entrances to the tanks should be fully secured shut. A resource management program is recommended to slowly replace non-native vegetation with indigenous species and to control the spread of eucalyptus woodland, pampas grass, and coyote bush to reduce fire hazards.

The pier will require restraints to prevent people from accidentally falling off. This may entail the removal of existing pipelines and replacement with a railing. It is recommended that the pipes, as well as the vapor recovery system and loading arms at the ends of the wharf, be removed, as they will require high maintenance and may become an environmental hazard. Low level lighting should be provided on the pier and along the promenade. The promenade should be a wide, tree-lined, walkway with special pavement, benches, and other amenities. Local artists should be considered to design unique public features (such as benches and lighting standards) that will enhance the unique quality of the site and establish a special identity.

## 8. Transportation

Access and circulation is a major consideration in the planning of Point Molate. Detailed investigations are needed to determine exactly what kinds of transportation-related improvements will be needed in support of reuse. Following are descriptions

of transportation issues and the improvements that will likely be required to implement the Plan. Desirable and necessary pier improvements are also discussed.

a. I-580 Interchange. One of the greatest constraints to reuse of the site is poor vehicle access. There is only one road into Point Molate, and it is directly accessible from only the west-bound direction of I-580, near the Richmond-San Rafael Bridge tollgate. Those traveling eastward across the bridge must drive two exits past the tollgate (to the Castro Street exit), cross under the freeway, return to the interstate, and continue westward back to the Western Drive/Point Molate exit. Also, the west-bound on-ramp to I-580 is an unconventional left-hand on-ramp.

The lack of direct access for eastbound vehicles poses a constraint for all proposed land uses to some extent. However, the existing interchange configuration would be particularly inconvenient for residents traveling to and from Marin on a daily basis.

No trip generation studies based on the proposed land uses have yet been conducted. This type of study is needed to assess the impacts of reuse on I-580 traffic volumes and flow. Also, a trip generation study will help determine whether or not enough traffic would be generated to justify/require the reconfiguration of the interstate interchange to provide direct west-bound access and improve the west-bound on-ramp. In addition, an interchange feasibility analysis will be necessary to determine if in fact a west-bound off-ramp could be constructed at that location, and if it could be built economically. Any modifications to the existing interchange, if required, will most likely require upgrading the entire interchange to current standards, including increased curve radii for better sight distances, longer acceleration/deceleration distances, wider shoulder widths, retaining walls, and other features.

b. Western Drive. The access road into Point Molate is Western Drive, a 24-foot wide, two-lane road with potholes and no shoulders, curbs and gutters, sidewalks, or bicycle lanes. It lies within a 40-foot wide City easement. No capacity studies have yet been conducted for this roadway.

Reuse may necessitate a variety of improvements to Western Drive, including road and/or shoulder widening, resurfacing, and a safe pedestrian/bicycle route. The widening of Western Drive in the Historic District is not recommended because of the potential impact on historic features, and because most of the traffic generated by reuse will occur south of this area. The roadway may be realigned through the Southern Development Area to accommodate future land uses. An ample landscaping easement and/or berming would assist in mitigating traffic impacts to the adjoining residences. Street tree planting along the entire length of Western Drive from the interchange through Point Molate is recommended. In addition, the intersection of



Western Drive and the road to Dutra Materials south of the site may need to be realigned to improve sight distances.

It is recommended that Western Drive receive special treatment at the entrance to Point Molate to establish a gateway. Landscape features and plantings at this entrance should be major design features, commanding attention and evocative of the historic character of the site. A separate design should be developed for this entry. Design features could include tree "plantations", creating a landscaped island in the middle of the roadway with identification signage or constructing landmarks, such as red brick crenelated walls reminiscent of the Winehaven parapet, on either side of the entrance to the site. This area should be well lit and all unattractive features should be removed or mitigated with landscaping.

The majority of traffic on Western Drive through Point Molate is generated by four facilities located further north, and on-site environmental clean-up activities. Truck traffic generated by the Port of Richmond amounts to between 100 and 230 tanker truck trips per month, or 4.5 to 10.5 trips per work day. There have been incidents of tank spillage, leading to the closure of sections of Western Drive (Uribe & Associates, 1995).

Any expansion of these facilities that would create additional traffic carrying hazardous materials, such as the oil terminal proposed by Wickland Oil to the north of Point Molate, would require an assessment of adverse impacts on reuse at Point Molate.

c. Internal Circulation. Secondary roads and paved aprons are prevalent at Point Molate. Very few of them will be needed for reuse, except as described in the land use sections above and as shown in Figure 7. Roads in the Hillside Open Space may remain and be used as hiking trails. Some of the paved areas can be used for parking, or, as in the case of the shoreline park, can provide a durable surface for public events. Where used, pavement needs paint striping to more clearly delineate circulation and parking stalls. Small parking lots located in strategic, convenient, and less visible areas are preferable to fewer, larger parking lots. No signalized street lights exist at Point Molate, or are needed for reuse.

d. Alternative Transit. Currently, there are no bicycle or bus routes to Point Molate. Use of the pier has been limited in the past to Naval fuel supply ships.

In an effort to help minimize vehicular traffic to and from Point Molate, the Plan recommends a bicycle trail along the shoreline and a staging area near the pier. The

City and interested agencies should continue to pursue trail development both north and south of Point Molate so that regional linkage can be provided.

At some point in the future after a "critical mass" of permanent users and public visitors is established, it may be possible to extend and operate a City bus route to Point Molate, as well as a school bus route. A special private shuttle to and from the Richmond BART station, located three miles to the east, should be considered along with other ideas as part of a Transportation Demand Management (TDM) measure to minimize vehicle traffic and to serve residents.

Water access to the site will be encouraged by the City through redevelopment and reuse of the pier, and through promotional materials and programs. The pier, which is 1,450 feet long and has a load capacity of 80,000 tons, can accommodate vessels up to 800 feet long, with a draft of up to approximately 18 feet, without dredging at the end (pers. comm. with Tom Robertson). Water depth along the causeway varies from one foot to nine feet according to 1984 nautical charts. The pier is sufficiently strong for pedestrian use and emergency or maintenance vehicle traffic.

The surface of the pier is adequate but in relatively poor shape; some repair is required if tourism is to be promoted as planned. It will need continuous maintenance.

The pier is at risk of suffering damage from liquefaction, lateral spreading, and seismic shaking in the event of an earthquake. It would likely require redesign to meet current seismic requirements (Moffatt & Nichol Engineers, 1996). A more detailed evaluation is recommended to determine: (1) if this is actually the case; (2) the minimum that would be required to make it usable for public docking; and (3) the cost of such improvements. The assessment should include an evaluation of the removal or re-anchoring of existing fuel and water lines, and whether the system has emergency shut-off valves.

## **9. Utility Infrastructure**

This section describes the plan for providing essential utility and community services in support of reuse at Point Molate. Utilities include the potable and fire protection water supply, storm water, sanitary sewer, industrial sewer, electricity, natural gas, street lighting, and telephone and telecommunication systems.

Issues related to the utility infrastructure at Point Molate are varied. First and foremost, utility systems have received only a cursory assessment of their condition and capacity. In order to determine the cost of upgrading them to meet current

standards and reuse capacity requirements, and in some cases replacing them entirely, extensive field investigations need to be conducted by specialized civil engineers. Until this is accomplished, it can only be surmised what improvements will actually be needed, based on available information.

It is expected that infrastructure redevelopment and replacement costs will be substantial at Point Molate, and that reuse priorities will ultimately be those which have the ability to raise the capital resources needed to make site-wide improvements through private land sales and development.

a. Water Supply. The Navy's water supply system is approximately 50 years old and continuously leaks. East Bay Municipal Utility District (EBMUD) supplies the water to the Navy's system, which is distributed to the site in an eight-inch pipe along Western Drive from the Potrero and Richmond Reservoirs. Water is pumped uphill to a 1,134,000-gallon storage tank and redistributed on-site via the Navy's system which consists of a main 14-inch line and several secondary lines that provide fire protection throughout the Hillside Open Space (Figure 4-4 in Appendix B). The Fleet and Industrial Service Center in Oakland (FISCO) monitors the Navy's system from the tank. The water supply system is currently shut down, except for the main line, which is being kept operational for fire protection.

Lead above the U.S. Environmental Protection Agency's (EPA) established standards has been found in the Navy's drinking water system.

EBMUD is planning to replace the Potrero Reservoir (tank) and the six-inch section of pipe at the north end of Western Drive with a 12-inch pipe. A reduced reservoir capacity is planned in anticipation of limited projected industrial use in the service area.

The following evaluations are recommended to fully assess the quality, condition, and capacity of the water supply:

1. The condition and reusability of the entire water pumping and distribution system should be assessed for conformance with the latest specifications and standards of the City of Richmond, EBMUD and other appropriate jurisdictions. EBMUD is the regional water provider for the area and EBMUD standards should be the criteria used for reusability of the Navy system.
2. The adequacy of the system for meeting the capacity needs of the proposed uses should be evaluated.

3. Drinking water should be sampled and tested for lead content throughout the system and the source of lead determined.
4. Cathodic protection of old and possibly new pipelines may be required to comply with the latest American Water Works Association (AWWA) standards.
5. EBMUD should reconsider the planned capacity of the Potrero tank and distribution lines to Point Molate in light of the uses proposed in this Plan. The City should request EBMUD to remove the old lines when they install the new ones.
6. An assessment should determine the need for a new EBMUD reservoir to serve those portions of the site above 100 feet, as well as for a new pumping plant. An assessment should be made of the site's water service demand and of providing additional reservoir facilities.
7. The fire protection system should be tested to verify that it will withstand higher pressure requirements (60 to 150 pounds per square inch). This test should include pipelines and appurtenances and consider the effects of all changes in pipeline sizes and loop system arrangements.
8. The feasibility and requirements should be determined for adopting the monitoring system so it is compatible with the City's system.

At this point in time, it is anticipated that the Navy's water supply system will require substantial repair and upgrading, if not full replacement, to satisfy reuse and new development needs. In addition, water meters will be needed for individual water users.

b. Stormwater System. The stormwater collection system is comprised of storm catchment basins, storm drains, stormwater lines, holding and settling tanks for removing floating fuel, and outfalls (Figure 4-3 in Appendix B). The discharge of storm water is governed by the National Pollutant Discharge Elimination System (NPDES) program.

The condition and adequacy of the system is unknown, but should be further assessed in the field to ensure that discharge into the bay meets environmental standards. This would include the following:

1. An evaluation of soil and groundwater contamination after the environmental clean-up program is completed.
2. Preparation of a storm drainage master plan that corrects problems and deficiencies.

The system may need to be permitted by the Regional Water Quality Control Board (RWQCB). The entire storm system would have to be field inspected, televised, and hydrostatically tested to determine if major improvements are required.

c. Sanitary Sewer System. Point Molate has its own sanitary sewer system (Figure 4-6 in Appendix B). There is a primary sewage treatment plant at the edge of the shoreline and secondary treatment ponds nearby. The facility serves only the northern third of the site where buildings currently exist. The treatment plant has been closed and cleaned but not dismantled. Sanitary sewer lines have been plugged and capped at the manholes. As part of the Installation Restoration Program, the treatment ponds will be decommissioned. Similar to storm water, permits are issued under the NPDES program. The current permit expires on October 19, 1999 (PRC Environmental Management, Inc., 1996).

The treatment plant can be reactivated mechanically and electrically, but there is doubt that the RWQCB would authorize it without it being upgraded to meet current standards. Secondary treatment would be required in the form of a "package treatment plant" unless solids were removed and hauled off-site by truck. Development in the central and southern portions of the site would require connection to a sanitary sewer system. It is recommended that the City:

1. Determine what improvements are necessary to bring the treatment plant and related facilities up to code and to ensure adequacy and reliability.
2. Compare the costs of improving the plant for secondary treatment with the long-term operating costs of removing solids for deposition elsewhere.
3. Evaluate the capacity of the existing plant to determine if new development can be accommodated or not, and if not, evaluate the feasibility of increasing the capacity of the system or connecting to the City's sewer system either by gravity or by a pumping station.

d. Industrial Sewer. The Oil Reclamation Plant (ORP) transferred ballast, wastewater, and fuel from the pier and other areas to storage tanks. After the tank contents settled and separated, fuel was extracted and recycled. The remaining wastewater was then transferred to another tank for further separation, and sent on to the treatment ponds. These systems have been de-activated, except for the treatment ponds.

Information regarding the condition of the causeway boxes, tanks, pumps, and associated equipment is unavailable and would require a field survey to obtain. An industrial sewer system will not be needed in support of the reuse proposed. Any industry that is considered should not depend on such a system.

e. Electricity. Pacific Gas and Electric (PG&E) provides electricity to Point Molate via a single 12 kV (kilovolt), three-phase service that terminates at the main switchgear near building 13, the substation (Figure 4-5 in Appendix B). One 12.5 kV feeder runs from the main switchgear to the main substation where it is stepped down to 2400 volts for distribution. The five 2.4 kV distribution circuits that emanate from the substation are owned by the Navy. The circuits are not connected with normal open tie switches, preventing another circuit to pick up load in the event of a power failure. As-built drawings and other records showing the main single line and describing the electrical loading analyses for the distribution feeders and equipment ratings cannot be located.

A number of transformers contain greater than 50 parts per million (ppm) of PCB, a hazardous material. These should be replaced and properly disposed to avoid the risk of contamination.

A field audit needs to be conducted to provide the following information:

1. The layout, sizing, and condition of the electrical system, including the switchgear, poles, lines, transformers, and other equipment, to determine whether the equipment can be reused or should be replaced. Facilities must be brought into compliance with the standards of a service provider. Once the configuration of the system and condition of the equipment is known, electrical loads to be placed on each distribution line can be assigned. The adequacy and reliability of the electrical system can then be adjusted for application to proposed uses. Uses that require continuity of electrical energy will demand additional reliability, including service from more than one source or other forms of emergency power. Some rearrangement of the distribution feeders or additional feeders may be required to meet this need.

2. Electrical loading and equipment ratings to determine how the system can best be adapted for specific proposed reuse and development. Any available recent maintenance records and work orders would be useful in making these determinations.

Meters will be required for individual users. Under recent California Public Utilities Commission rulings, consumers will, in the near future, be able to select and negotiate rates for electrical services from suppliers other than PG&E.

Consideration should be given to providing underground duct banks where new development occurs to maximize flexibility of installation, additions, and changes to the electrical wiring systems. The undergrounding of wiring systems will improve the reliability of the systems and eliminate unsightly overhead wiring. While initial costs may be higher, the costs can be shared among the suppliers of the various systems.

- f. Natural Gas. Currently, no natural gas is supplied to Point Molate. While gas is not essential, it would be desirable as an alternative to diesel and electrical space heating, and to add value to the housing as a source of energy for cooking. Commercial establishments that serve food would also benefit from having gas.

Gas would have to be extended to Point Molate via a new pipeline from the nearest source. An investigation would be required to determine if this is feasible and economical. All users would need to be metered.

- g. Street Lighting. Street lights are overhead high pressure sodium fixtures mounted on a combination of wood and electric poles, some of which are dedicated poles. The existing street lighting system provides minimal illumination, typical of a rural environment (Figure 4-5 in Appendix B).

Reuse and new development will need higher illumination levels and more even distribution of illumination. Areas not currently lit will require system expansion. Redesign and expansion of the system can be postponed until new development is planned.

It is recommended that when the system is upgraded, all lines be placed underground to enhance the scenic quality of the site. Although metal poles are more durable, wood poles would be in keeping with the historical character of the site.

h. Telephone and Telecommunications. Pacific Bell provides telephone service and owns the telephone lines on the site. The Navy owns and operates the associated equipment, which is part of the Consolidated Area Telephone System (CATS).

There are no fiber optic lines, except between the main office and gas station. Cable TV wiring is provided to the cottages and the fire station.

The new communications age requires a means of interconnection, either through hard-wired systems such as telephone or fiber optics, or wireless systems such as space satellites. For the size of development proposed at Point Molate, the wired systems would be adequate and more affordable. The existing telephone wiring will likely be increased by Pacific Bell. Fiber optic lines, which are recommended for new development, would be the responsibility of the individual developers. Additional Cable TV wiring is also recommended, particularly for new housing and commercial entertainment establishments. If Cable TV is to be franchised out, the supplier would install the wiring system.

#### 10. Public Safety

This section focuses on public services for fire, police, and medical emergency services. Concerns related to existing contamination are discussed in Chapter II, Section A.5.

a. Fire Protection. There is a fire station at Point Molate that is owned and operated by the Navy. Naval Supply (NAVSUP) supplies the fire engine, pumper truck, and brush rig. In the past, the station was manned by a full-time Fire Chief and five individuals (two 24-hour shifts). Back-up services can be provided by Station 61, the nearest City fire station. A fire alarm system exists only in the area of fuels operations at the shoreline, and on the pier. It is connected to FISCO.

It is uncertain if the existing equipment will be made available for the City of Richmond to purchase or otherwise use. An analysis should be conducted to determine the minimum staff requirements for manning the station during and upon completion of Plan implementation. This analysis should evaluate the alternative of providing additional staff at Station 61, and comparing the benefits and costs. In addition, an assessment should be made of emergency access routes and additional access needs.

To minimize the chance of fire, a fire hazard mitigation plan should be developed and implemented. To ensure fire protection, the water supply system should be upgraded as described above, and all buildings should be supplied with ceiling sprinklers and



fire alarm systems. The alarm signals would be transmitted over the telephone or fiber optic systems to the appropriate central control station.

b. Police Protection. One Naval Security Officer is currently stationed at Point Molate. The closest police station (Southwest) is three to five minutes away, within the standard response time.

A police station is not needed, but future tenants and owners may want to hire security guards for specific buildings and development areas. Also, the City of Richmond and/or California Highway Patrol may need to include Point Molate on their regular patrol.

c. Medical/Emergency Services. No medical facilities exist at Point Molate, but there is a heliport at the north end of the site. Current City codes prohibit its use; however, use of this heliport for medical, fire, and other emergencies is desirable. NAVSUP provides some medical emergency equipment on-site.

Point Molate is tied into the City of Richmond telephone Emergency Medical Services. The closest hospital is Kaiser-Richmond, eight minutes away.

No medical or emergency staff or additional facilities are anticipated to be needed for reuse.

## 11. Parcelization

A parcelization plan has not been prepared as part of this document because specific land uses have yet to be fixed permanently. This has been done intentionally to ensure flexibility in meeting changing market conditions and land use demand as the Plan is implemented.

Parcelization is necessary if land is to be sold and/or subdivided for private ownership. Applicable areas include those proposed for residential, special light industrial and research and development uses. In addition, if the proposed shoreline park is to be leased or transferred in fee title, the boundary needs to be legally defined. This would also apply to any other land leased or sold, such as to a higher education institution.

The land areas shown in Figure 7 portray the generalized boundaries of residential development and light industrial parcels (but not individual residential lots). Parcels will become better defined later in the reuse planning process as more information

becomes available regarding market demand, necessary building and infrastructure improvements, and the success of environmental clean-up.

### **C. Property Conveyance/Disposal**

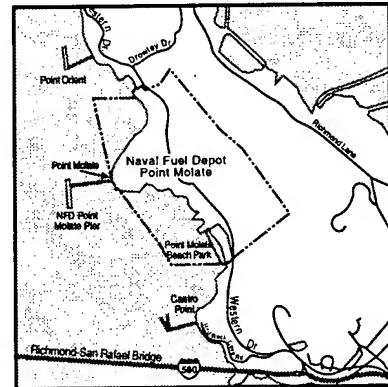
This chapter describes the various mechanisms for transferring property from the Navy to other entities for reuse and development. They are presented in order of priority established as part of the base closure process.

The LRA published and disseminated a Notice of Availability to agencies and organizations in early 1996 to attract Homeless Assistance and PBC applicants. The following entities responded: Contra Costa College/West Contra Costa Unified School District (CCC/WCCUSD), Orchidnet, Richmond Rescue Mission, Richmond Neighborhood Coordinating Council, and Contra Costa Health Services (See Appendix E).

The BRAC evaluated the applicants' proposals based on the following criteria: project viability, benefit as a PBC, benefit to the public, use and development compatibility, marketability and economic contribution, and environmental compatibility. However, the BRAC decided not to approve any of the requests so that the City could maintain control over reuse of the buildings at Point Molate. It was decided to recommend that two applicants, CCC/WCCUSD and Orchidnet, use facilities under leases with the City (discussed below in Section 3). The request for use was recommended because they demonstrated the largest amount of public benefit through the provision of job training and educational programs, and because the proposal was determined to be compatible with the overall reuse concept. Orchidnet's request was also highly recommended because their use of facilities will have educational and tourism components consistent with the BRAC's goals and objectives. The Richmond Rescue Mission's homeless assistance request was not recommended primarily because they require the attendance at religious services as part of their program, raising the issue of separation between church and state, and also because of the lack of community support services for the homeless at Point Molate. The BRAC decided that the Richmond Neighborhood Coordinating Council's PBC request for warehousing and office space had no direct public benefit and was not recommended. Contra Costa Health Services application was also not recommended. These are described in more detail below.

---

## D Table of Reuse Alternatives



---

## APPENDIX D: TABLE OF REUSE ALTERNATIVES

---

### CONTENTS

Page

#### Appendix D – Table of Reuse Alternatives

Table D-1: Distribution of Uses by Alternatives Based on the <i>Point Molate Reuse Plan</i> .....	D-1
---	-----

**TABLE D-1**  
**DISTRIBUTION OF USES BY ALTERNATIVE BASED ON THE POINT MOLATE REUSE PLAN**

	Alternative 1 Residential/Commercial		Alternative 2 Industrial/Commercial		Alternative 3 Recreation/Commercial	
	Bldg. area (sq. feet)	Acres	Bldg. area (sq. feet)	Acres	Bldg. area (sq. feet)	Acres
<b>Commercial Land Use</b>	175,967	26.8	175,967	26.8	160,903	26.5
<i>Winehaven-Core Development Area</i>						
Winehaven Building (1): [2 of 3 floors]	132,590		132,590		132,590	
Wine Shop, Museum, Retail						
Restaurant, Meeting Rooms,						
Performing Arts, Recording Studio						
Cottage 32:	996		996		996	
Office						
Cottages 33-59:	25,220		25,220		25,220	
Retreat Accom., Bed & Breakfast,						
Classrooms, Labs, Admin.						
Winemaker's Cottage (60):	2,097		2,097		2,097	
Retreat Center, Job Training						
<i>Northern Development Area</i>						
Administration Building (123) & Miscel. Build's:	15,064		15,064			
Job Training, Small Hotel, Conf. Center						
<b>Industrial Land Use</b>	97,474	6.3	1,346,233	61.3	213,670	8.2
<i>Winehaven-Core Development Area</i>						
Winehaven Building (1): [1 of 3 floors]						
Winery (processing)	66,295		66,295		66,295	
Cottage 31 & Refrigeration Build. (10):						
Micropropagation	19,860		19,860		19,860	
Steam Generating Plant (13):						
Used Clothing, Warehousing	5,067		5,067		5,067	
Fire Station	4,236		4,236		4,236	
<i>Northern Development Area</i>						
Light Industry*			304,921	14.0		
Building 6:						
Winery, Special Industry			116,196		116,196	
Building 17:						
Warehousing	2,016		2,016		2,016	
<i>Central Development Area</i>						
Light Industry*			130,680	6.0		
<i>Southern Development Area</i>						
Special Light Industry*			696,962	32.0		
<b>Residential** Land Use</b>	1,095,696 (730 units)	55.0		0.0		0.0
<i>Northern Development Area</i>						
Miscellaneous Buildings:	163,500 (109 units)					
Single Family Residential						
Building 6:	116,196 (77 units)					
Live/Work						
<i>Central Development Area</i>						
Multi-Family Residential	180,000 (120 units)					
<i>Southern Development Area</i>						
Single Family Residential	486,000 (324 units)					
Multi-Family Residential	150,000 (100 units)					
<b>Open Space/Recreation Land Use</b>		224.9		224.9		278.3
Open Space (Hillside)		189.6		189.6		189.6
Open Space (Shoreline)		14.4		14.4		14.4
Shoreline Park		20.9		20.9		20.9
Open Space/Recreation						53.4
<b>Totals</b>	1,369,137	313.0	1,522,200	313.0	374,573	313.0

Notes: Area and acreages are taken from Table 2 of the *Point Molate Reuse Plan* (City of Richmond 1997a)

\* calculation of floor area assumes a floor-area ratio (FAR) of 0.5

\*\* each residential unit assumed to be 1500 square feet in size



---

## **E Supporting Technical Information**

### **E.1 Visual Resources**

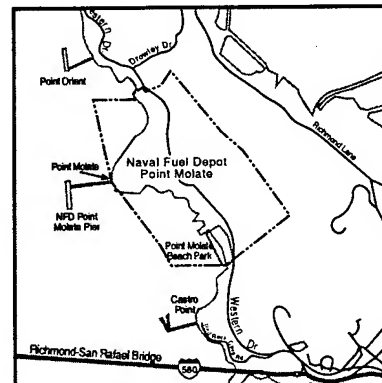
### **E.2 Cultural Resources**

### **E.3 Biological Resources**

### **E.4 Transportation, Traffic, and Circulation**

### **E.5 Air Quality**

### **E.6 Surplus Determination**



# APPENDIX E: SUPPORTING TECHNICAL INFORMATION

## CONTENTS

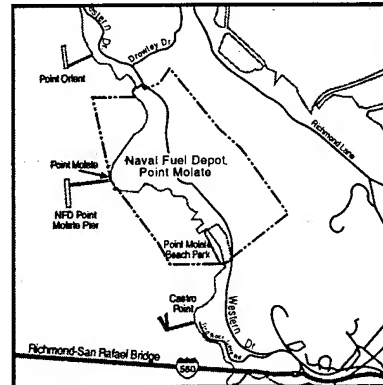
Page

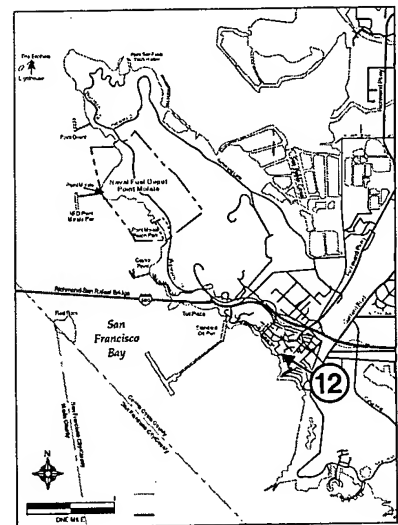
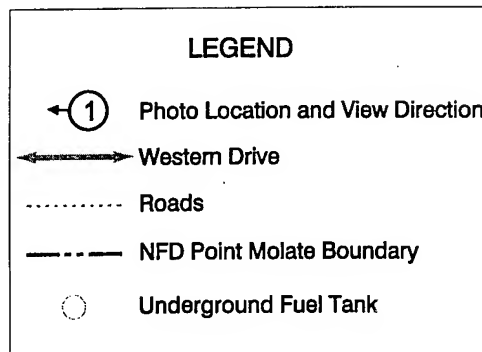
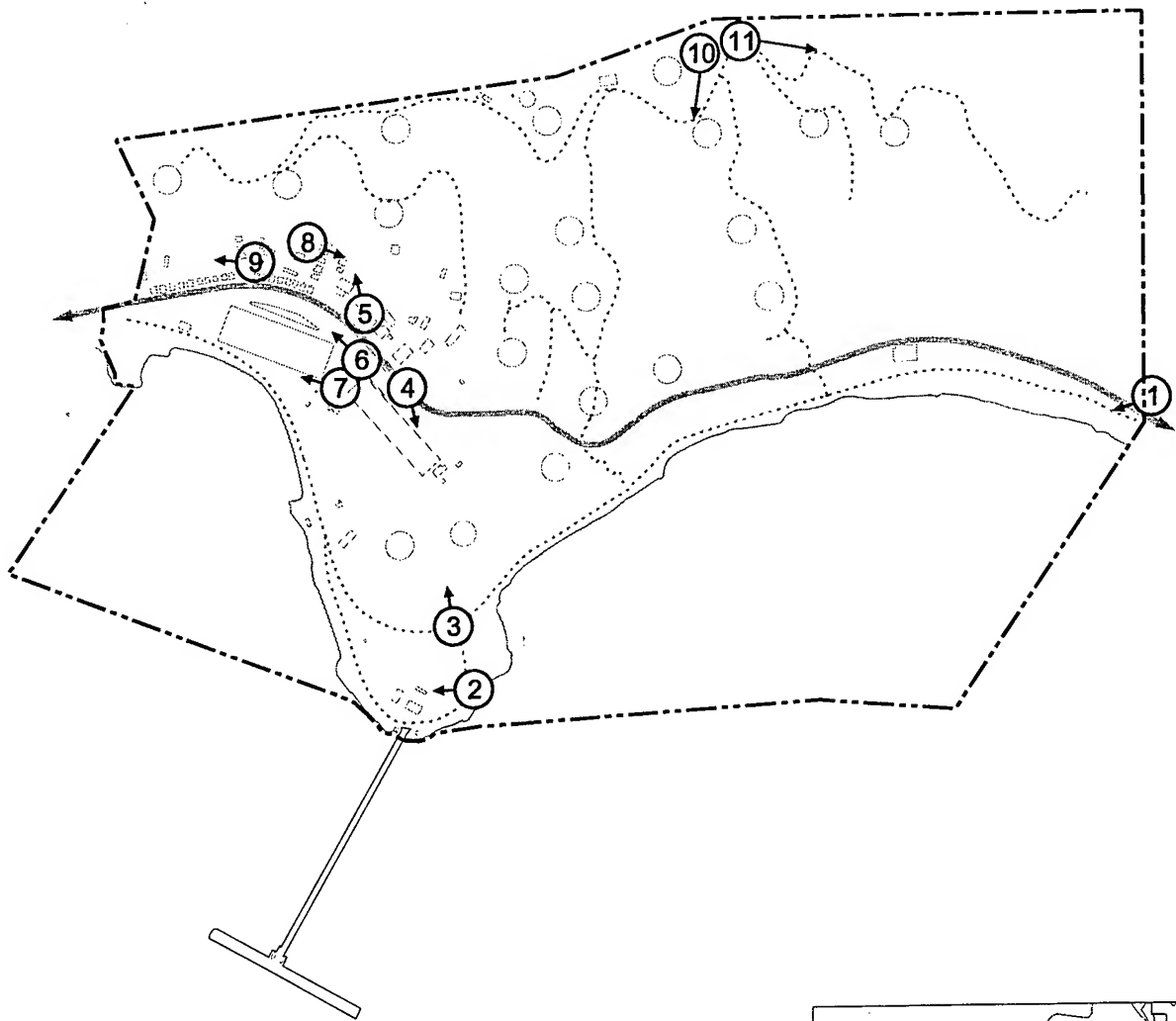
### Appendix E – Supporting Technical Information

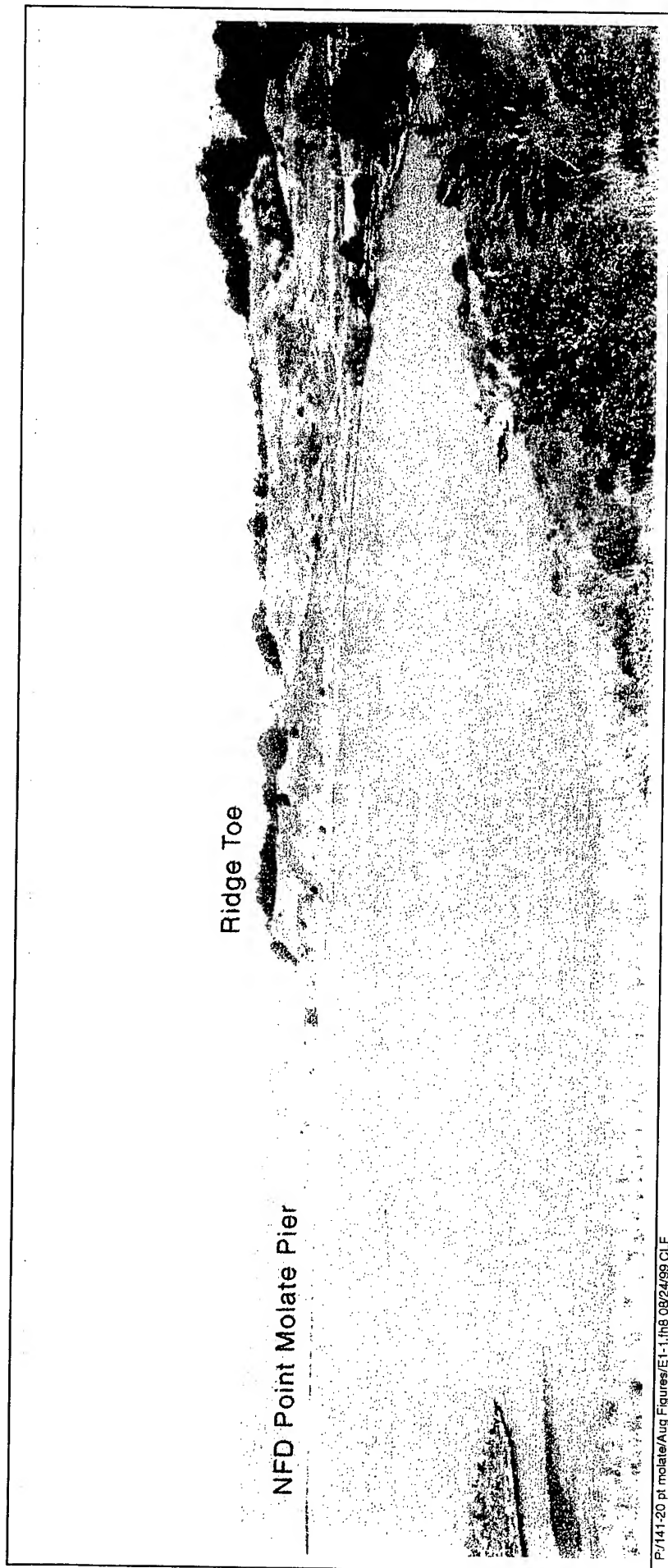
E.1	Visual Resources	
	Visual Character Photo Locations.....	E-1
	Existing Conditions Photos.....	E-2
	Traffic Photos .....	E-15
E.2	Cultural Resources	
	Table E.2-1: Summary of Cultural Resources at NFD Point Molate .....	E-19
	Table E.2-2: Summary of Archeological Studies for NFD Point Molate .....	E-22
	Table E.2-3: Summary of Historic Architectural Resource Studies at NFD Point Molate .....	E-23
	Table E.2-4: Record of Native American Consultations.....	E-23
	Table E.2-5: Assessments of Recorded Cultural Properties at NFD Point Molate for Significance .....	E-24
	Memorandum of Agreement .....	E-25
E.3	Biological Resources	
	Table E.3-1: Animal Species Potentially Occurring at NFD Point Molate.....	E-39
	Table E.3-2: Threatened and Endangered Animal Species Potentially Occurring at NFD Point Molate .....	E-41
	Table E.3-3: Other Sensitive Species Found Within a One-Mile Radius of NFD Point Molate....	E-42
	Table E.3-4: Plant Species Detected at NFD Point Molate .....	E-43
E.4	Transportation, Traffic, and Circulation	
	Figure E.4-1: Existing Traffic Volumes (AM/PM).....	E-53
	Figure E.4-2: Alternative 1 Project Trips.....	E-54
	Figure E.4-3: Alternative 2 Project Trips.....	E-55
	Figure E.4-4: Alternative 3 Project Trips.....	E-56
	Figure E.4-5: Year 2010 No Action Alternative Traffic Volumes.....	E-57
	Figure E.4-6: Year 2020 No Action Alternative Traffic Volumes.....	E-58
	Figure E.4-7: Year 2010 Plus Alternative 1 Traffic Volumes.....	E-59
	Figure E.4-8: Year 2010 Plus Alternative 2 Traffic Volumes.....	E-60
	Figure E.4-9: Year 2010 Plus Alternative 3 Traffic Volumes.....	E-61
	Figure E.4-10: Year 2020 Plus Alternative 1 Traffic Volumes (at Full Build-out).....	E-62
	Figure E.4-11: Year 2020 Plus Alternative 2 Traffic Volumes (at Full Build-out).....	E-63
	Figure E.4-12: Year 2020 Plus Alternative 3 Traffic Volumes (at Full Build-out) .....	E-64
E.5	Air Quality	
	E.5.1 Estimation of Traffic-Related Criteria Air Pollutants.....	E-65
	E.5.2 Estimation of Traffic-Related Carbon Monoxide Concentrations .....	E-68
	Table E.5-1: Summary of Average Weekday Traffic-Related Emissions from Vehicle Travel Associated with Alternative 1.....	E-71
	Table E.5-2: Summary of Average Weekday Traffic-Related Emissions from Vehicle Travel Associated with Alternative 2.....	E-72
	Table E.5-3: Summary of Average Weekday Traffic-Related Emissions from Vehicle Travel Associated with Alternative 3.....	E-73
	Record of Non-Applicability (RONA).....	E-75
E.6	Surplus Determination .....	E-77



## E.1 Visual Resources







P:/141-20 pt molate/Aug Figures/E1-1.h8 08/24/99 CLF

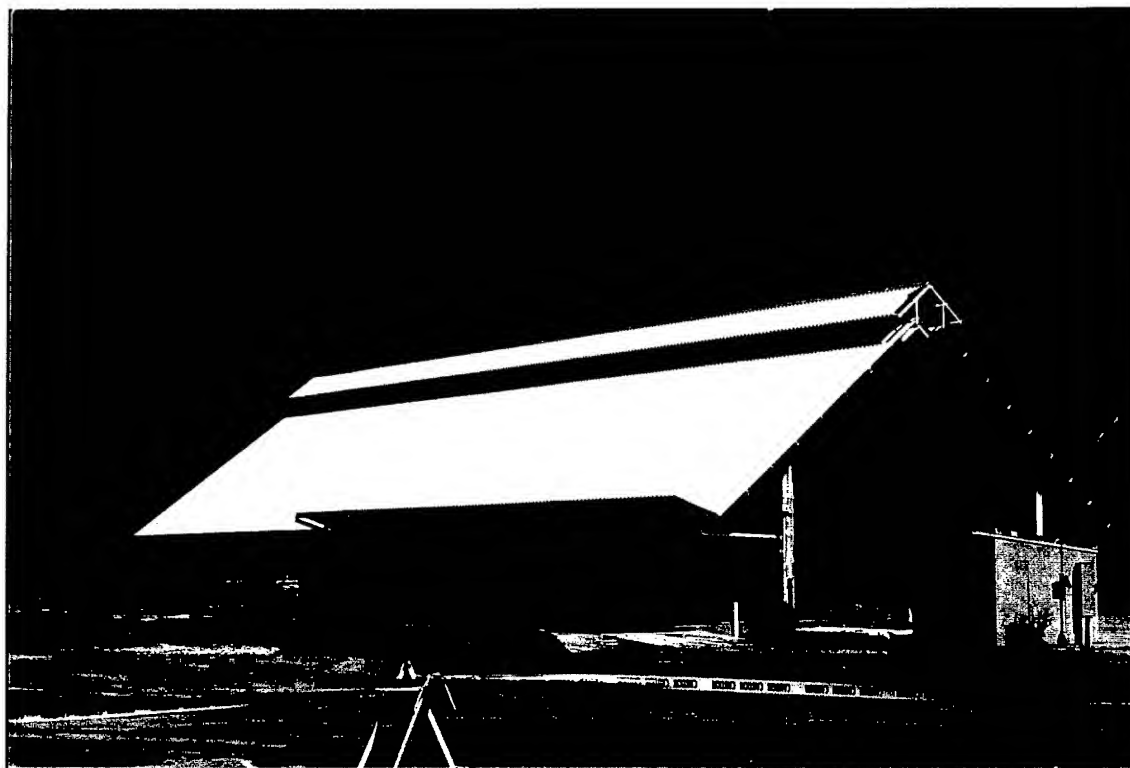
Photograph E.1-1-1: Looking North at NFD Point Molate, from Western Drive

Marin  
County

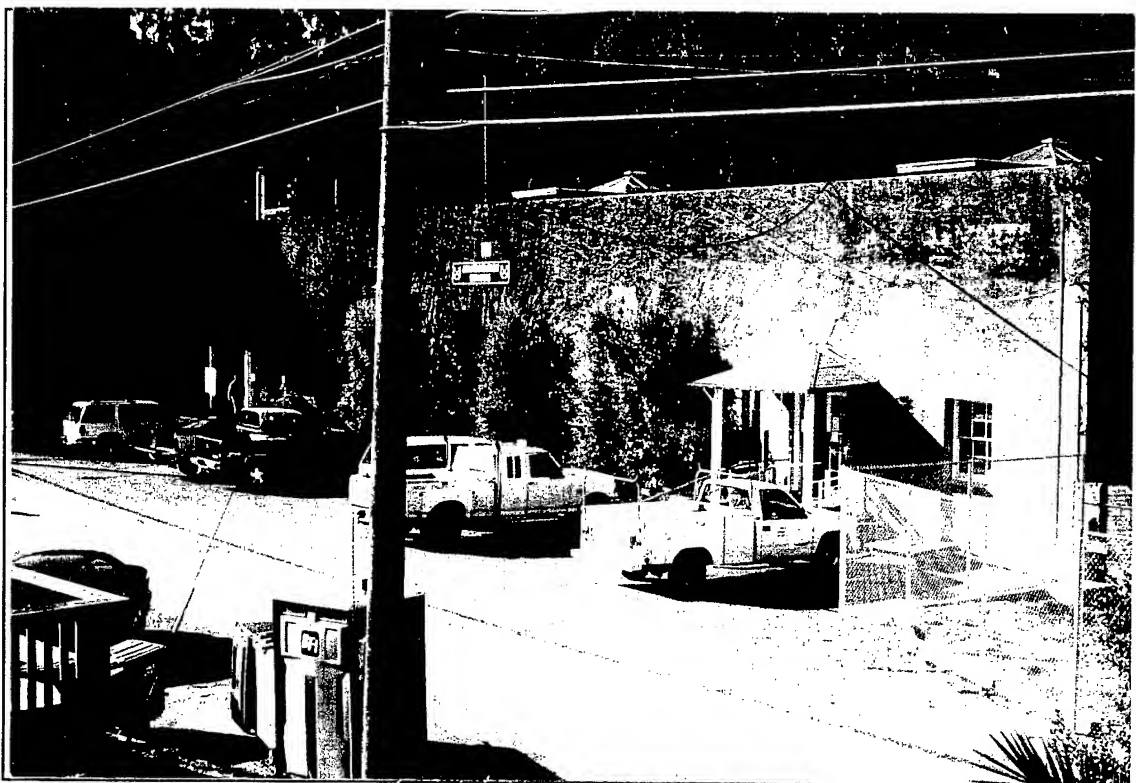


San  
Francisco  
Bay

Photograph E.1-2: Lay-down Area at Pier Head, Looking West  
at San Francisco Bay and Marin County



Photograph E.1-3: Fuel Operation Building at Pier Head, Toe of Ridge



Photograph E.1-4: Administration Building (Building 6)



Photograph E.1-5: Firehouse (Building 13)

Building 1



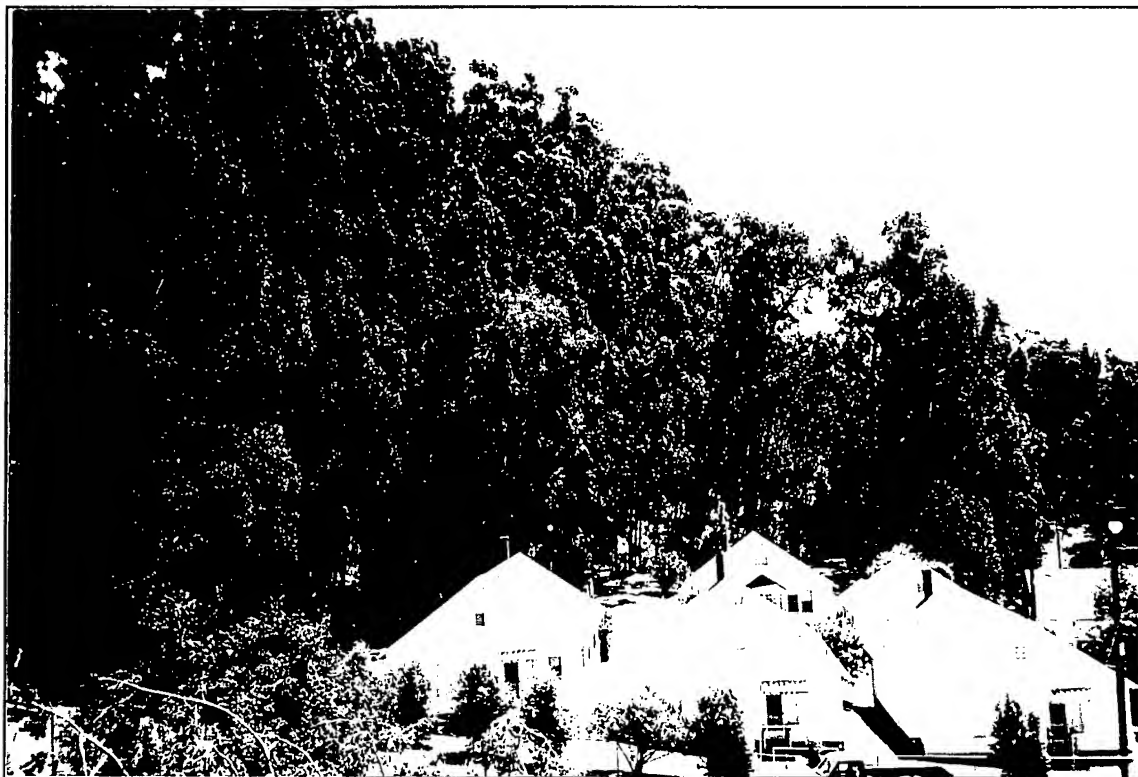
Cottages

Western  
Drive

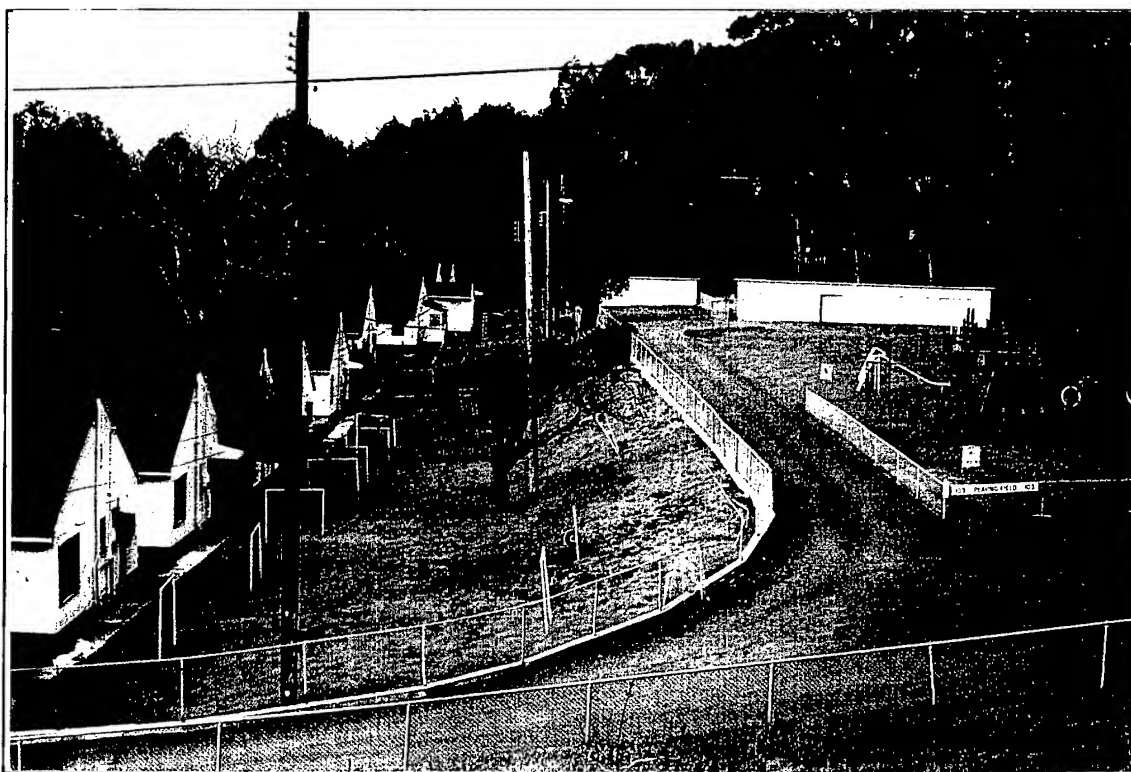
Photograph E.1-6: Looking North at the Winehaven Building (Building 1),  
Building 10, and Military Housing (Winery Cottages)\*



Photograph E.1-7: Winehaven Building\* (Building 1), West Side



Photograph E.1-8: Military Housing\*, Looking South



Photograph E.1-9: Military Housing\*, Looking North,  
with Eucalyptus Grove in the Background





P714120 pt molate/Aug Figures/E1-10.tns 8/5/99 DYU

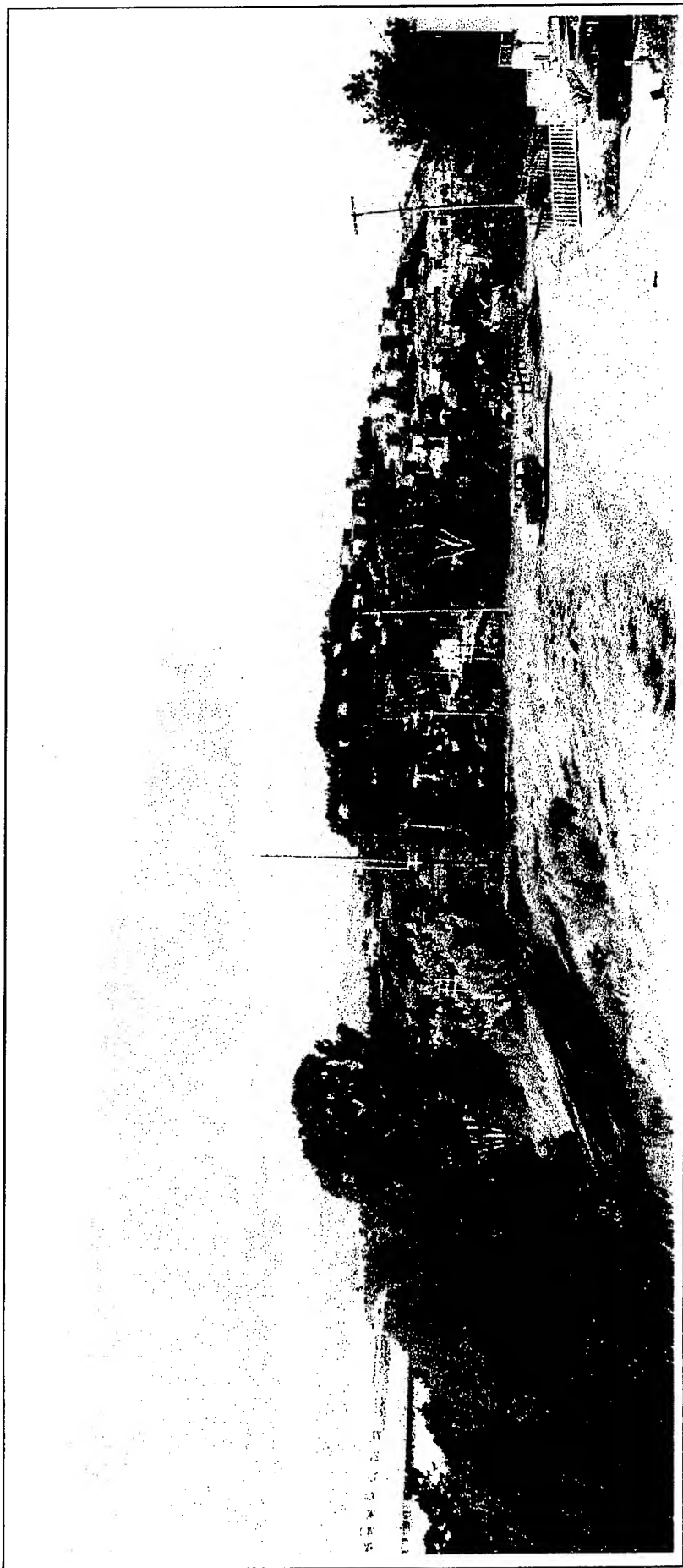
Photograph E.1-10: Looking North Along Ridge Road. Chevron/NFD Point Molate Boundary Shown at Fence on Right





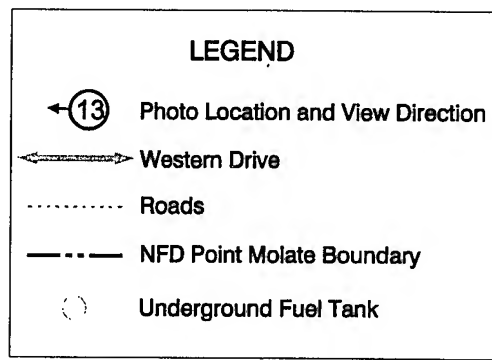
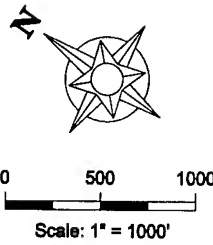
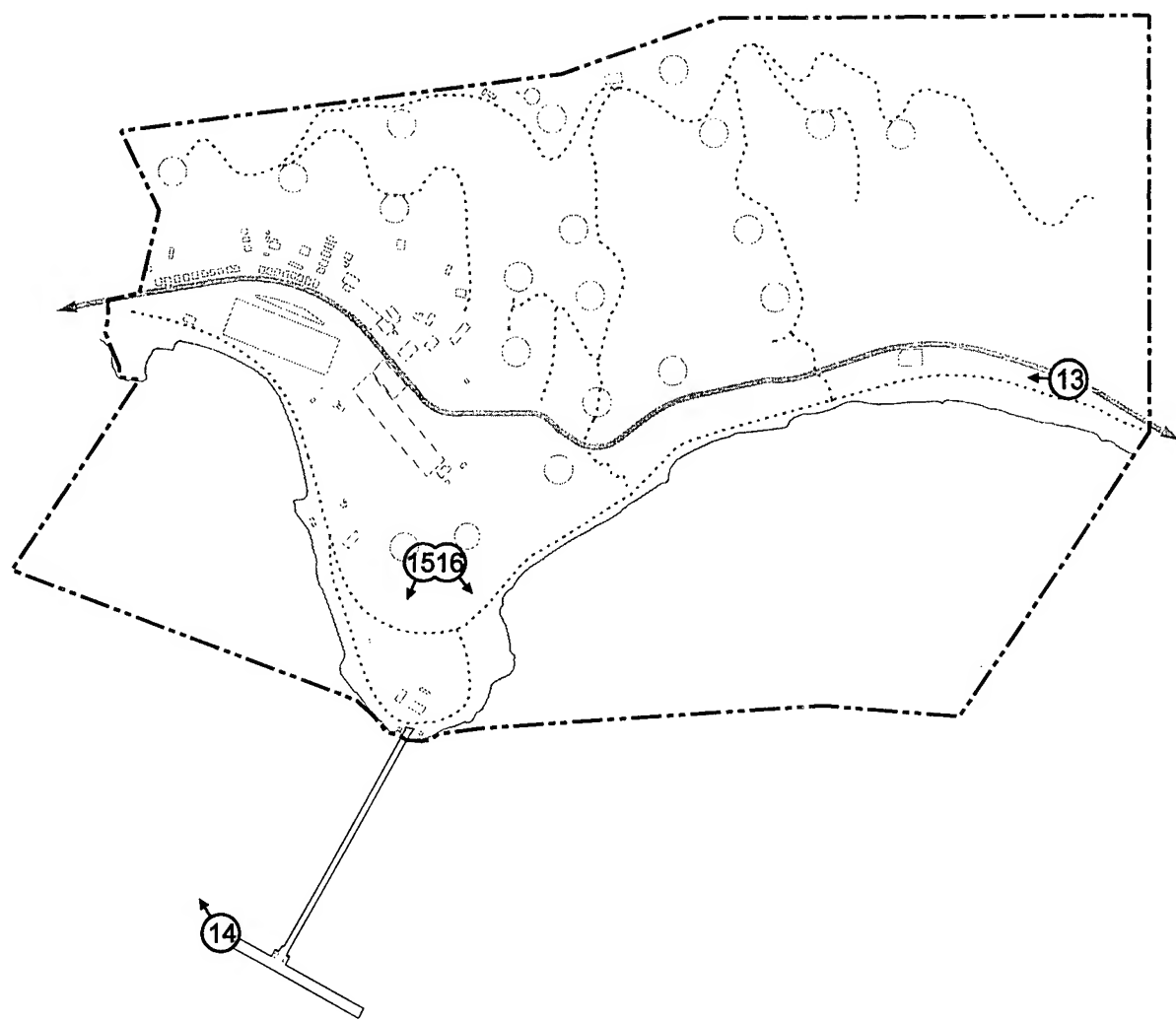
P:\production\14120 pt molate\Aug Figures\E1-11.11h8 8/5/99 DYD

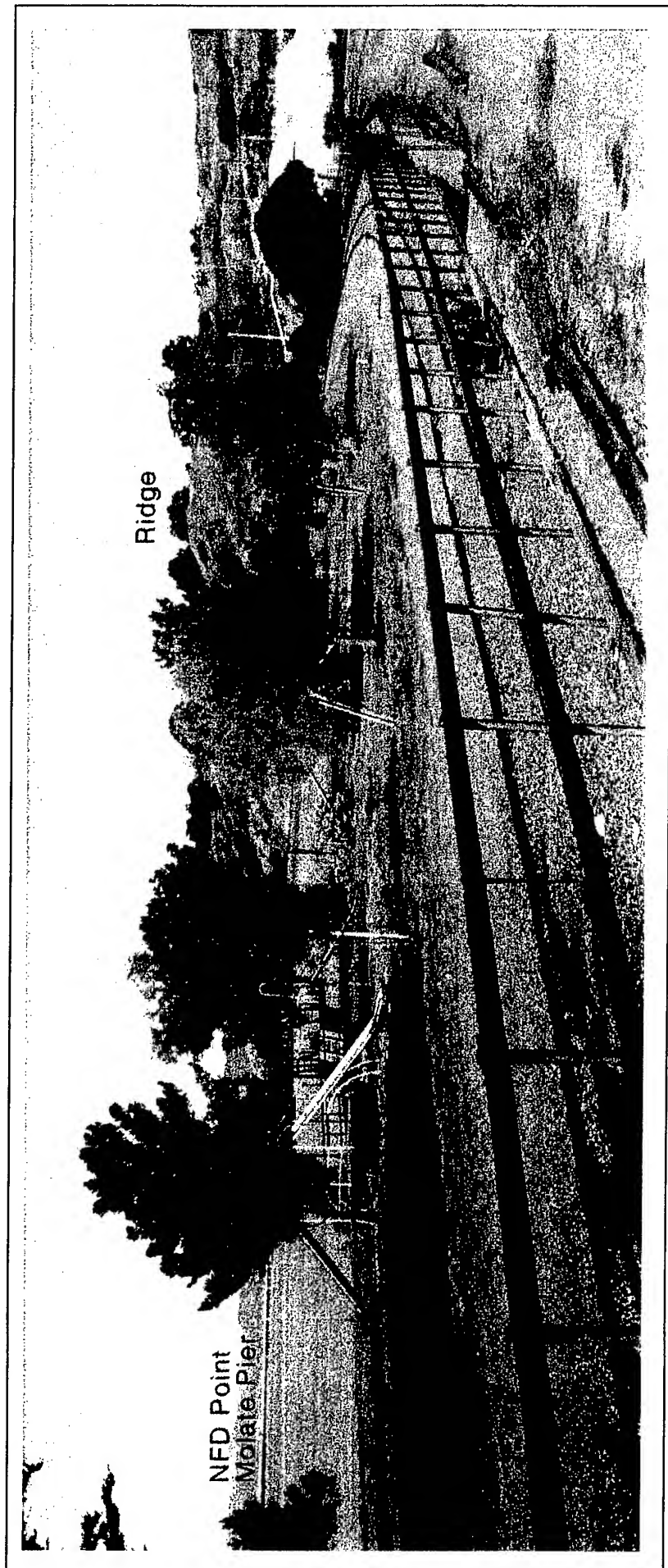
Photograph E.1-11: Looking South From Ridge Road Along Chevron/NFD Point Molate Boundary



P:/141-20 pt molate/Aug Figures/E1-12.fh8 08/24/99 CLF

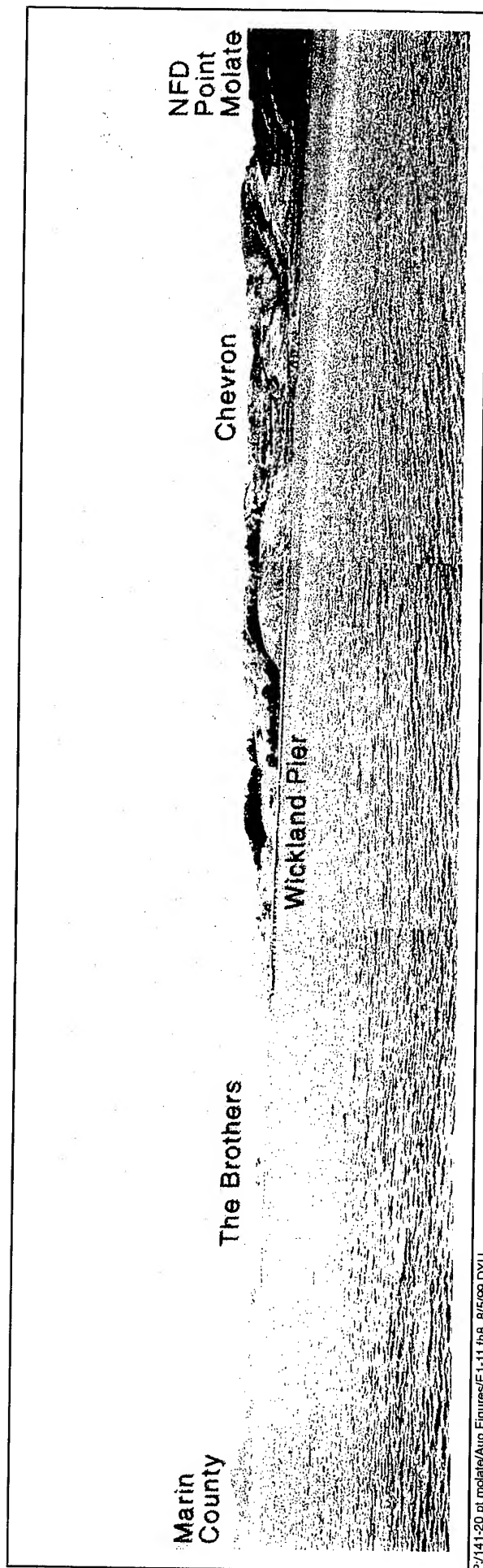
Photograph E.1-12: Looking Northwest from Crest Avenue in Point Richmond



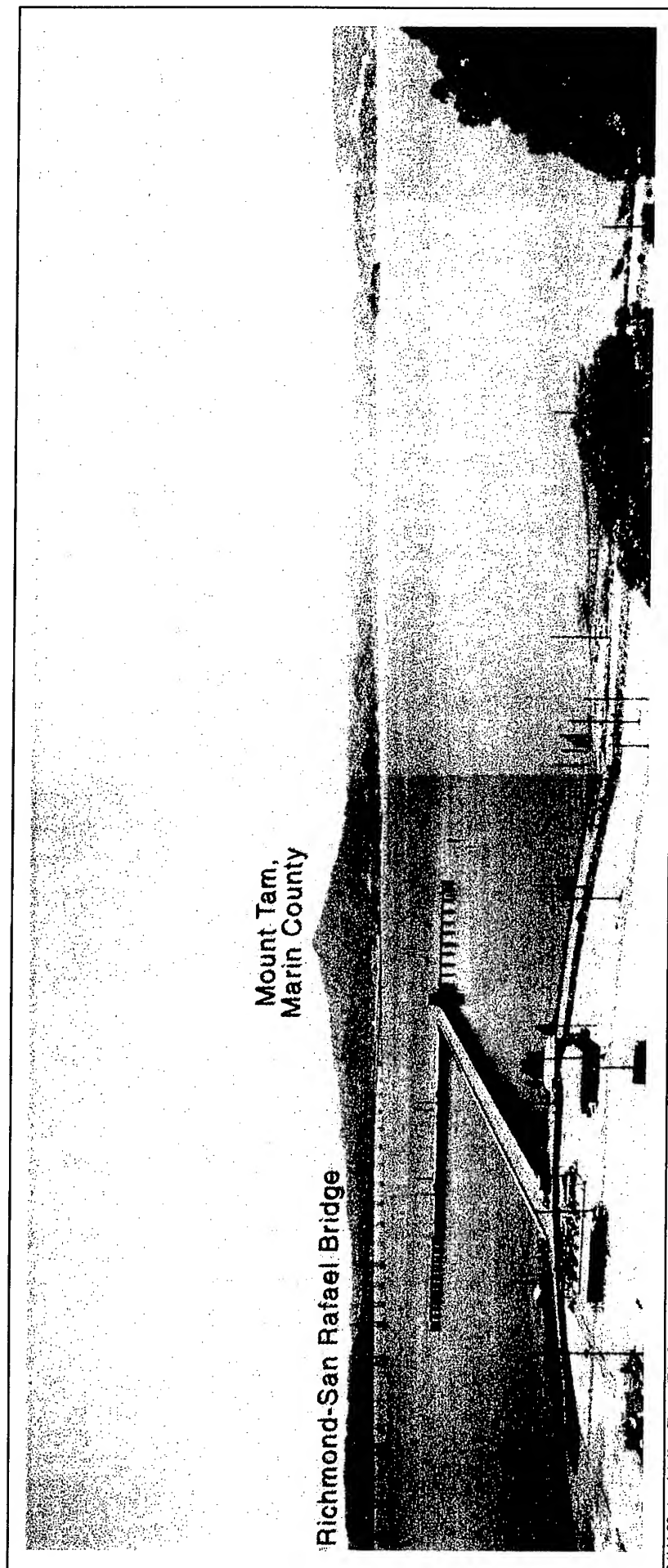


Photograph E.1-13: Point Molate Beach Park with Pier in the Background

P:/141 pt molate/Aug Figures/E1-13.lh8 08/24/99 CLF

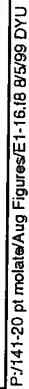


Photograph E.1-14: Looking North from End of NFD Point Molate Pier Toward San Pablo Bay



P:/141-20 pt molate/Aug Figures/E1-15.18 8/5/99 DYU

Photograph E.1-15: Looking West from Ridge Above NFD Point Molate Pier



Photograph E.1-16: Looking South and West from Ridge Above NFD Point Molate Pier

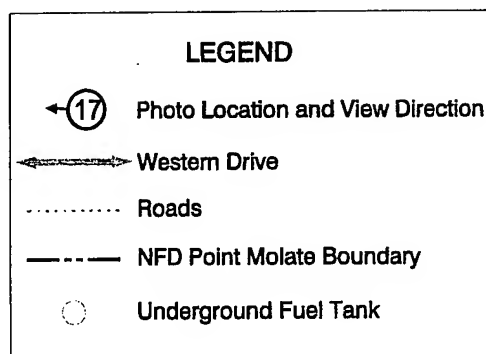
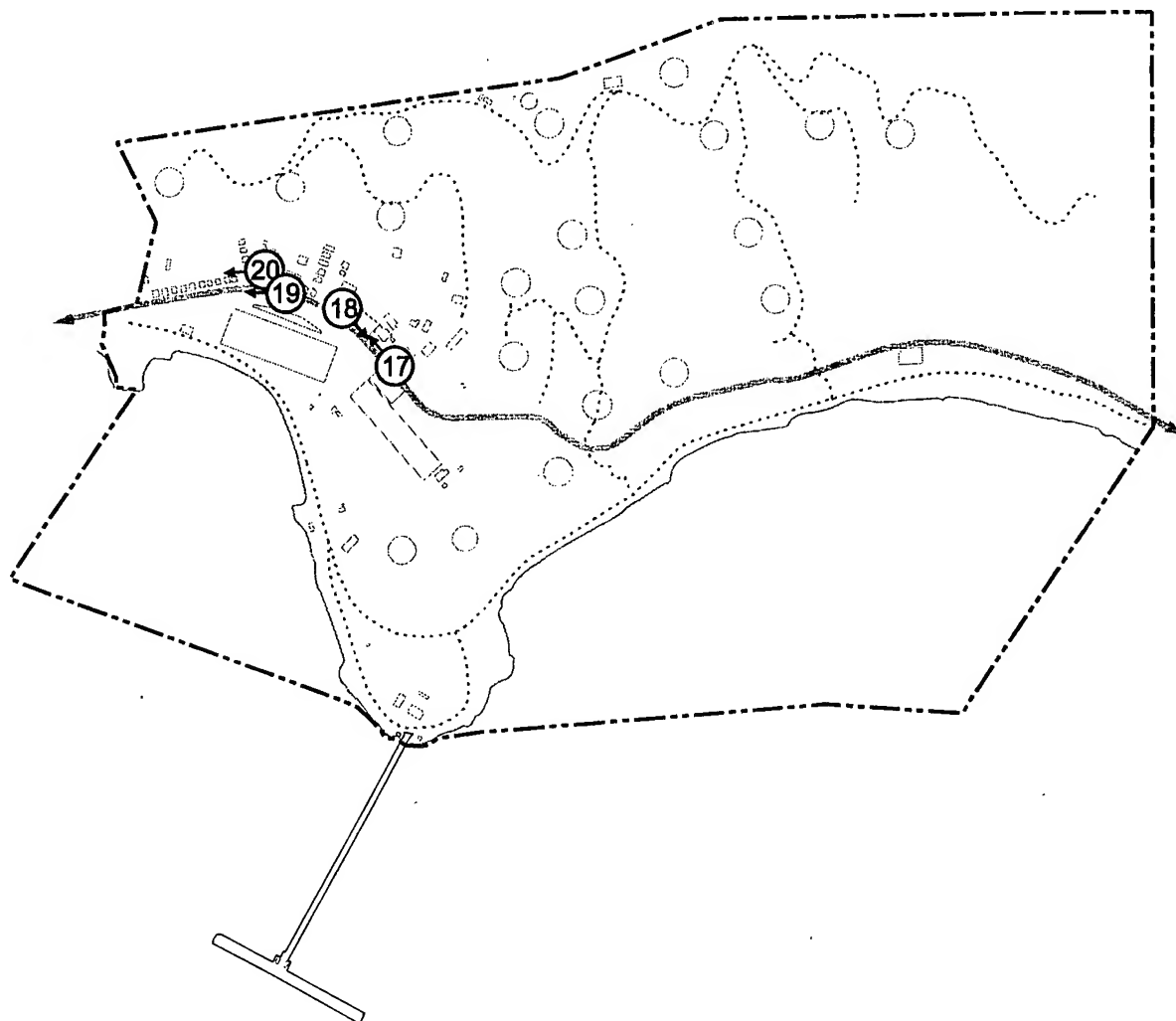


Figure E.1-3: Traffic Photo Locations



Bldg 1



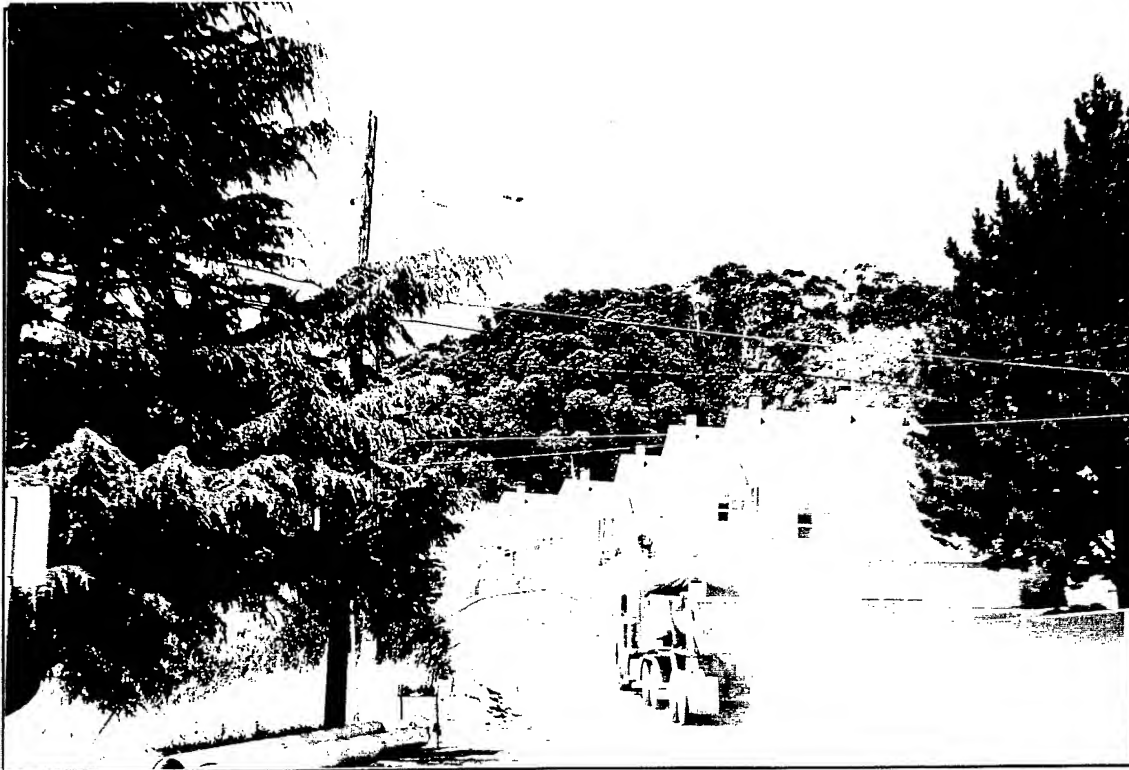
Bldg 123

Photograph E.1-17. Western Drive, Looking North

Bldg 123



Photograph E.1-18. Western Drive, Looking South



Cottages

Photograph E.1-19. Military Housing/Winery Cottages,  
Looking North from Western Drive.



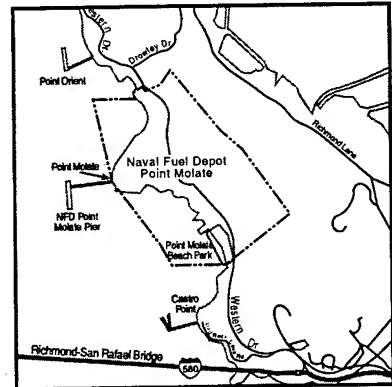
Cottages

Photograph E.1-20. Military Housing/Winery Cottages,  
Looking North from Western Drive

---

*This page intentionally left blank.*

## E.2 Cultural Resources





**TABLE E.2-1**  
**SUMMARY OF CULTURAL RESOURCES AT NFD POINT MOLATE**

SITE NUMBER (NAME, TEMP. NO.)	DESCRIPTION	NOTES
CA-CCO-282	<p>Subsurface investigations in 1984 determined site has been destroyed (no evidence found). No surface evidence of site observed during 1980 (Chavez 1981) and 1984 surveys (Chavez and Holson 1985).</p> <p>Site originally depicted as a prehistoric shell mound situated on a slope adjacent to the Bay, on a small point of land (since altered by grading, road development, etc.). Nelson (1909) reported whale bone, skeletal remains, obsidian arrow points (2), roughly spherical hammerstones, cordium shells, mussel, clam (2 kinds, loped and another), purhusa, oyster (scarce), fish vertebrae, animal bones (very scarce), fragment of a pestle (longitudinal split), 12-inch (30.5 cm) triangular anvil or pounding stone (cited in Chavez 1981:4).</p>	<p>Originally recorded in 1907 by Nelson (1909). Site photographs from 1907 on file at UC Berkeley.</p> <p>No surface evidence of site observed by Chavez (1981) or Chavez and Holson (1985). Test excavated (4 auger borings) in 1984 by Chavez and Holson (1985), with negative results.</p>
CA-CCO-283	<p>Site originally described as a prehistoric shell mound situated at edge of bay, measuring approx. 150 ft by 200 ft (45 m by 61 m); notes from 1939 excavation reveal that mound was 6-ft-high. Materials collected from site by various researchers include human remains (20 burials excavated in 1939; 3 human bones located and reinterred in 1985); shellfish and faunal remains; chert and obsidian flakes and tools; ground and battered stone tools, etc.</p> <p>Dated to Ellis Landing Aspect of the Berkeley Pattern, ca. 500 B.C. to A.D. 500.</p> <p>Test excavation in 1984 revealed midden soils with high content of clam and mussel shell, fire-cracked rock, chert and obsidian flakes and bifaces, baked clay, groundstone, sparse faunal bone, human remains (3 fragments) from disturbed context (reburied). Remaining deposit varied from 2 in. to 49 in. (5 cm to 125 cm) in depth; portions buried. Extensive disturbance to midden deposit, including redeposition, mixing with historic and modern items.</p> <p>South portion of site overlaps Chinese Shrimp Camp/CA-CCO-506H.</p>	<p>Originally recorded in 1907 by Nelson (1909). In April 1909, Nelson collected artifacts and human remains from site.</p> <p>Excavated by Driver and Treganza in 1939 (study never published; notes and collection at Archaeological Research Facility, UC Berkeley). Beardsley (1954) analyzed and reported on 20 burials recovered from site by Driver and Treganza. (Materials collected from site from ca. 1909 to 1946 housed at Lowie Museum, UC Berkeley are summarized in Chavez and Holson 1985:Appendix 1.)</p> <p>Test excavated (5 1-by-1-m units, 35 auger borings, two seawall sections, 19 shovel probes) and surface collected in 1984 by Chavez and Holson (1985).</p>

**TABLE E.2-1**  
**SUMMARY OF CULTURAL RESOURCES AT NFD POINT MOLATE**  
**(CONTINUED)**

SITE NUMBER (NAME, TEMP. NO.)	DESCRIPTION	NOTES
CA-CCO-422H (Winehaven Historic District)	Winehaven, a complex of 35 buildings constructed between 1907 and 1919, is significant historically and architecturally in the areas of wine production and industrial design. During its 12-year operation, it was one of the largest (perhaps the largest) wineries in the world, capable of storing, aging, and bottling millions of gallons of wine each year. Architecturally, the Winehaven complex represents an unusually intact company town, containing 29 residences, two very large winery buildings, a shipping building, and three support buildings (a power plant, fire house, and warehouse). In addition, the winery building is unusual and significant in its castellated, industrial Gothic design and as examples of fireproof and seismically reinforced industrial buildings designed in response to the 1906 earthquake in Northern California.	<p>Original NRHP nomination form prepared by Lucretia Edwards of the Winehaven Historical Study Committee, Richmond (Edwards 1976).</p> <p>Winehaven Historic District listed on the NRHP on October 2, 1978.</p> <p>MOA between the Navy and SHPO, accepted by the Advisory Council established February 7, 1996, placed the 29 contributing residential units in caretaker status. The MOA stipulated Navy would record the buildings for the Historic American Buildings Survey and reevaluate the historic district boundary; both are complete. Proposed changes submitted to the Keeper of the National Register in 1996.</p> <p>These changes were rejected on October 27, 1998 (NPS 1998)</p>
	The original 1976 NRHP District nomination placed this complex within an estimated 100-acre (40 ha) area (later measured at 71-acre [29 ha] area), which encompassed 35 contributing buildings associated with the historic Winehaven complex and 28 non-contributing buildings and structures related to more recent land uses (mostly military). Recent boundary reanalysis concludes that <i>core area of concern</i> for Winehaven District comprises a 27-acre (11 ha) area that encompasses the 35 contributing buildings plus fewer (11) non-contributing buildings.	<p>MOA among the Navy, SHPO, and ACHP, established February 22, 1995, with reference to placing certain districts contributing buildings (housing units) in caretaker status. MOA stipulates Navy would carry out certain historic preservation measures, including Historic American Building Survey (HABS) documentation and boundary reanalysis.</p> <p>Per MOA, HABS documentation (No. CA-2658) completed in consultation with National Park Service (n.d.) (U.S. Navy 1996e).</p> <p>Per MOA, reanalysis of District boundary by JRP Historical Consulting Services (U.S. Navy 1996j) concluded that boundary should be revised to encompass 27-acre (11 ha) core area of concern. SHPO concurred with proposed revision (SHPO 1996a; U.S. Navy 1996b).</p> <p>These changes were rejected on October 27, 1998 (NPS 1998)</p>
CA-CCO-423	Five loci marked by shell midden soils, including four lacking integrity (secondary deposits disturbed by developments) and one 16-in. (40-cm) deep locus judged to maintain sufficient integrity for future research. Site within area of Winehaven Historic District/ CA-CCO-422H.	Originally recorded in 1980 by Rippey, Gerike and Praetzellis. Site augered in 1980 (Rippey and Praetzellis 1980) to define boundaries, depth, constituents and assess integrity.

**TABLE E.2-1**  
**SUMMARY OF CULTURAL RESOURCES AT NFD POINT MOLATE**  
**(CONTINUED)**

SITE NUMBER (NAME, TEMP. NO.)	DESCRIPTION	NOTES
CA-CCO-506H (PM-1; Chinese Shrimp Camp)	<p>Historic community occupied ca. 1860s to 1915 by Chinese who fished for shrimp in San Francisco Bay (area north of Red Rock). By ca. 1904, camp had 5 wharves and 25 buildings. Camp eventually abandoned in response to state regulation of Chinese fishermen on the Bay, including use of shrimp nets and closed seasons.</p> <p>Artifacts collected by Chavez and Holson (1985) study: ceramic food storage and consumptive containers (Plain and Improved White Earthenware, glazed stoneware, Four Seasons, Celadon, Chinese Brown Glazed Stoneware, Three Circles, porcelains); bottle glass, canning jars, condiment jar, window pane; wire nails. No historic features identified by limited excavation (north end of historic site overlaps with prehistoric site CA-CCO-283), but two small jetties and an upright post (possible pier remnant) noted at low tide. Integrity has been affected by grading, constructions of railroad and road, etc.</p>	<p>Mentioned in field notes for CA-CCO-283 by Nelson (1909).</p> <p>Listed as "Chinese Fish Camp" in California Inventory of Historic Resources (California Department of Parks and Recreation 1976).</p> <p>Originally recorded and test excavated in 1984 by Chavez and Associates (in Chavez and Holson 1985).</p>



**TABLE E.2-2**  
**SUMMARY OF ARCHEOLOGICAL STUDIES FOR NFD POINT MOLATE**

REFERENCE	DESCRIPTION OF WORK	FINDINGS
Nelson 1909	Conducted first extensive survey of archeological sites in the San Francisco Bay region between 1906 and 1908, working under direction of J.C. Merrian at UC-Berkeley.	Identified two prehistoric shell mounds at Point Molate (CA-CCO-282 and -283), among total of 425 "earth mounds and shell heaps" in the region.
Driver and Treganza n.d. (1939)	Excavated twelve 5-foot-square units at CA-CCO-283 (study never published).	Recovered 20 prehistoric burials (later reported on by Beardsley (1954)).
Rippey and Praetzelis 1980	Records search, Native American consultation, 10-acre archeological survey and auger boring program for alteration of existing heating systems for 29 houses (install underground fuel tanks, chimneys).	Recorded newly identified prehistoric midden site (CA-CCO-423) with 5 loci (1 has integrity, 40-cm deep deposit; 4 are secondary deposits). Hypothesized low potential for significant archeological deposits associated with Winehaven Historic District (CA-CCO-422H).
Roscoe 1980	Records search and 1-acre archeological survey for Bypass Pipeline on APE Separator project.	Negative results.
Chavez 1981	Records search and archeological survey (unspecified acreage, facility-wide) for replacement of Water Distribution System.	Concluded that pipeline trenching may affect two previously known sites (CA-CCO-282 and -423).
Chavez and Holson 1985	Records search, historic research, Native American consultation, archeological survey of all unsurveyed areas (170-acres), subsurface testing to evaluate significance of CA-CCO-282, -283, and -506H (Chinese Shrimp Camp), and facility-wide management recommendations for Storm Damage Repair (Bayshore Bank Stabilization) project.	Facility-wide inventory revealed total of five cultural resources (CA-CCO-282, -283, 422H/Winehaven Historic District, -423, -506H/Chinese Shrimp Camp). Located and recorded historic Chinese shrimp camp (CA-CCO-506H), which overlaps portion of CA-CCO-283. Excavations revealed the once extensive midden deposits at CA-CCO-283 are greatly disturbed; site lacks integrity and was recommended ineligible for NRHP, but avoidance and/or monitoring suggested because human remains are present. Augering revealed likelihood that CA-CCO-282 has been totally destroyed; site recommended NRHP ineligible. NRHP eligibility of Chinese Shrimp Camp site undetermined; recommended avoidance and further study.

**TABLE E.2-3**  
**SUMMARY OF HISTORIC ARCHITECTURAL RESOURCE STUDIES AT NFD POINT MOLATE**

REFERENCE	DESCRIPTION OF WORK	FINDINGS
Edwards 1976	Winehaven Historical Study Committee (Oakland) prepared and submitted National Register nomination form for Winehaven Historic District.	Winehaven Historic District listed on National Register in 1978.
Wills et al. 1995	All World War II era buildings (8 total) and structures (24 in-ground tanks, wooden pier, communications antenna) evaluated for National Register eligibility.	State Historic Preservation Officer (SHPO) concurred with Navy's National Register ineligibility determination for all WWII buildings and structures (U.S. Navy 1996b; SHPO 1996b).
National Park Service (NPS) n.d.	Completed Historic American Buildings Survey (HABS) documentation for Winehaven Historic District (HABS No. CA-2658) pursuant to Memorandum of Agreement (MOA) dated 2/22/95.	HABS documentation formally accepted by NPS in letter dated 5/6/96 (U.S. Navy 1996e).
JRP Historical Consulting Services (U.S. Navy 1996j)	Conducted research regarding proposed revision of boundary of Winehaven Historic District pursuant to MOA dated 2/22/95.	Recommended that District boundary be reduced from ca. 71 acres to the 27 acres which encompasses all the historic complex, thereby increasing the ratio of contributing to non-contributing elements from 55% to 76%.

**TABLE E.2-4**  
**RECORD OF NATIVE AMERICAN CONSULTATIONS**

CONSULTANT	CONCERNS DOCUMENTED	REFERENCE
Alvin Tatoowi, American Indian Council, San Pablo	Requested to be notified and informed if significant prehistoric cultural resources are encountered at Point Molate.	Rippey and Praetzellis 1980:11-12
Wayne Roberson, Director, Native American Heritage Preservation Project, Contra Costa County	Interested in being consulted during all phases of archeological study of prehistoric sites at Point Molate. Requested human remains discovered during excavation at CA-CCO-283 be reinterred there after analysis, with reference to state codes.	Chavez and Holson 1985:4, 48

**TABLE E.2-5  
ASSESSMENTS OF RECORDED CULTURAL PROPERTIES  
AT NFD POINT MOLATE FOR SIGNIFICANCE**

<b>SITE DESIGNATION (NAME)</b>	<b>NATIONAL REGISTER ELIGIBILITY STATUS</b>	<b>ASSOCIATED NATIVE AMERICAN VALUES</b>	<b>REFERENCES</b>
CA-CCO-282	Determined ineligible (Criterion d).	Yes (burials associated)	Archeological assessment (Chavez and Holson 1985). Agency and SHPO consultation (U.S. Navy 1996b; SHPO 1996b).
CA-CCO-283	Determined ineligible.	Yes (burials associated)	Archeological assessment (Chavez and Holson 1985). Agency and SHPO consultation (U.S. Navy 1996b; SHPO 1996b).
CA-CCO-422H (Winehaven Historic District)	Listed on the National Register on October 2, 1978 (Criteria a and c).	No	Nomination form (Edwards 1976, Winehaven Historical Study Committee). Notice of listing on National Register (1978). HABS documentation (NPS n.d.). Historic Archaeological Site/Feature Survey Record (Praetzelis 1980). Proposed District boundary revision (City of Richmond 1998b; SHPO 1996a; U.S. Navy 1996j).
CA-CCO-423	Determined ineligible.	Potentially (burials possible)	Archeological assessment (Rippey and Praetzelis 1980). Agency and SHPO consultation (SHPO 1996b; U.S. Navy 1996b).
CA-CCO-506H (PM-1; Chinese Shrimp Camp)	Determined eligible (Criterion d).	No	Preliminary archeological assessment (Chavez and Holson 1985). Agency and SHPO consultation (SHPO 1996b; U.S. Navy 1996b, 1996d).
World War II era buildings and structures	Determined ineligible	No	Historic architectural assessment (Wills et al. 1995). Agency and SHPO consultation (SHPO 1996b; U.S. Navy 1996b).

# DRAFT

1/27/00 (MOA1)

## Memorandum of Agreement

### Among

The United States Navy, The Advisory Council on Historic Preservation and The California State Historic Preservation Officer Regarding the Layaway, Caretaker Maintenance, Leasing, and Disposal of Historic Properties on the Former Naval Fuel Depot, Point Molate  
Richmond, California

WHEREAS, the Department of the Navy (Navy) has been directed to layaway, place in caretaker maintenance, lease, and dispose of properties at the former Naval Fuel Depot (NFD), Point Molate by the Base Realignment and Closure Act of 1988 (P.L. 100-526), the Defense Base Closure and Realignment Act of 1990 (P.L. 101-510) (10 U.S.C. §2689), as amended in 1991 and 1993, and the Department of Defense Authorization for 1996 (P.L. 104-06 §2876) which permits the Navy to convey the property through a direct property transfer to the City of Richmond (City) at no cost to the City; and

WHEREAS, the disposal of NFD Point Molate will affect NFD Point Molate buildings and structures included in the Winehaven historic district, a property listed on the National Register of Historic Places (Register) and might affect archeological properties eligible for inclusion in the Register; and

WHEREAS, the Navy has consulted with the Advisory Council on Historic Preservation (Council) and the California State Historic Preservation Officer (SHPO) pursuant to 36 CFR Part 800, regulations implementing Section 106 (16 U.S.C. 470f); and

WHEREAS, upon disposal of the historic properties from the Navy to a non-federal entity, any Federal jurisdiction ceases and the jurisdiction of the historic property reverts exclusively to the City, and therefore, the City was invited to participate in the development of this agreement and has been invited to concur; and

NOW, THEREFORE, the Navy, the Council and the California SHPO agree the layaway, caretaker maintenance, lease, and disposal of NFD Point Molate shall be implemented in accordance with the following stipulations in order to take into account the effect of the undertaking on historic properties.

### Stipulations

The Navy will ensure that the following measures are carried out:

#### I. Winehaven Boundary.

A. Pursuant to concern expressed by the California SHPO that the boundary of the Winehaven historic district appeared to enclose more land and structures than appropriate the Navy retained the services of JRP Historical Consulting Services, Inc., Davis, CA, a firm of professional historians and architectural historians to reevaluate the Winehaven boundary as identified on the National Register Registration Form. This resulted in a report entitled "Proposed Boundary Revision, Winehaven, Richmond, Contra Costa County, California dated March 1996. (Exhibit 1, revised boundary map)

B. By letter of May 7, 1997, with the concurrence of the California SHPO received in a letter dated May 8, 1996 the Navy requested the Keeper of the National Register to revise the Winehaven historic district boundary in accordance with that identified in the "Proposed Boundary Revision, Winehaven" report dated March 1996.

C. By letter of October 27, 1998 the Keeper of the National Register advised the Mayor of Richmond that because Winehaven was nominated to the National Register prior to December 13, 1980 the nominated boundary could not be reduced in size and recommended an amendment be proposed by the Navy specifically identifying the contributing and non-contributing properties.

D. Prior to the conveyance of the property to the City the Navy shall:

1. prepare and submit to the Keeper of the National Register an amendment that specifically identifies the contributing and non-contributing properties to the Winehaven historic district; and
2. because National Register listed properties are included on the California Register of Historic Resources, the Navy shall appeal to the California Historical Resources Commission to reduce the Winehaven historic district boundary, as included on the State Register, to that identified in the "Proposed Boundary Revision, Winehaven" report dated March 1996, thereby removing the protection provided historic properties by the California Environmental Quality Act from the non-historic property included within the National Register nomination.

## II. Prehistoric Archeology.

A. The Navy has conducted extensive archeological inventories and investigations of NFD Point Molate and has identified three prehistoric archeological sites (CA-CCO-282, CA-CCO-283 and CA-CCO-423). Although human remains have been recorded at each of these sites, development of Point Molate and scientific study before and during Navy occupation have so disturbed these three sites that they no longer possess sufficient integrity to qualify for listing on the Register. Nevertheless, as long as the Navy has control and jurisdiction over the land on which they are located the Navy shall treat these areas as archeologically sensitive.

B. Prior to the transfer of the property to the City the Navy shall require all excavations within the archeological sensitive areas identified on Exhibit 1 to be preceded by an auger testing program administered by a professional archeologist meeting the standards prescribed by the Secretary of the Interior. If the testing program identifies intact buried archeology, its significance will be evaluated by the Navy in consultation with the SHPO. If found to be likely to yield important information, the Navy will require an archeological research design and treatment plan to be developed in consultation with the SHPO, and the Navy will ensure that the treatment plan is implemented in advance of the proposed excavation that might disturb the buried archeology.

C. The Navy shall provide the appropriate City officials copies of all documentation it has describing prehistoric archeology on Point Molate to ensure that the remains of the previously recorded archeological sites, should

Memorandum of Agreement  
NFD Point Molate - Disposal  
Page 3

they exist, will be afforded the protection provided by State law and local ordinance.

III. Historic Archeology.

A. Archeological investigations at NFD Point Molate have identified the remains of a Chinese shrimp fishing camp, as an historic archeological site (CA-CCO-506H), that have been determined eligible for listing on the Register by the Navy in consultation with the SHPO.

B. Prior to the transfer of the property to the City the Navy shall require all excavations or other activities with a potential for impacting archeological site CA-CCO-506H identified on Exhibit 1 to be preceded by an auger testing program administered by a professional archeologist meeting the standards prescribed by the Secretary of the Interior. If the testing program identifies intact buried archeology, the Navy will require an archeological research design and treatment plan be developed in consultation with the SHPO, and will ensure that the treatment plan is implemented in advance of any activity that would disturb the buried archeology.

C. The Navy shall provide the appropriate City officials copies of all documentation it has describing historic archeology on Point Molate to ensure that the remains of the previously recorded archeological site, should they exist, will be afforded the protection provided by State law and local ordinance.

IV. Artifacts and Records.

Prior to closure Fleet and Industrial Supply Center, Oakland coordinated the Naval Historical Center and National Archives surveys of the artifacts and records remaining at NFD Point Molate and arranged for the transfer of artifacts requested by the Richmond Museum of History to that institution and the Federal records requested by the National Archives to be sent to Sierra Pacific Branch of the National Archives and Federal Records Center in San Bruno, CA.

V. Layaway and Caretaker Maintenance.

A. The Navy has laid away the 29 Winehaven single-family worker houses as stipulated in the Memorandum of Agreement between the Navy and the California SHPO, accepted by the Council February 7, 1996.

B. The remaining Winehaven buildings and structures have been laid away by the Navy in accordance with a plan submitted to the California SHPO by letter of July 29, 1998 with the Navy's determination of "no effect" made in accordance with 36 CFR § 800.5(b).

VI. Recordation.

The Navy has recorded the Winehaven historic district in accordance with the standards of the Historic American Buildings Survey (HABS). By letter of May 6, 1996 the National Park Service advised the Navy that the documentation had been accepted. The Navy has forwarded copies of the HABS documentation to the California SHPO and to the City for placement in the City Library.

VII. Leasing of Historic Properties.

A. Prior to the transfer or conveyance by some other means from the control and jurisdiction of the Navy, the Navy may enter into interim leases and leases-in-furtherance of conveyance with the City which will permit tenants to adaptively reuse Winehaven listed buildings and structures, provided that the lease agreements require tenants to follow the recommended practices of the Secretary of the Interior's *Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings* in maintaining or adapting these historic properties for use and that the lease agreements prohibit any modifications of the buildings and structures without prior written approval of the Navy.

B. Prior to the transfer or conveyance of the property the Navy shall inspect the leased Winehaven buildings and structures semi-annually to ensure that the Secretary of the Interior's *Standards for Rehabilitation* are followed in maintaining or adapting the historic property for other uses and shall take appropriate remedial action to assure compliance where deviations are observed. Appropriate remedial action shall include notification of SHPO and Council.

VIII. Long Term Preservation Planning.

Within six months of the execution of this Memorandum of Agreement City staff shall recommend to the Council the designation of Winehaven, its contributing buildings and structures, as "Historic Structures" in order to afford them the protection provided such buildings and structures in accordance with the provisions of City of Richmond Ordinance NO. 24-82 N.S., *An Ordinance Amending the Richmond Municipal Code by Adding Thereto Chapter 6.06 Entitled Historic Structures* (Exhibit 2).

IX. Document Review and Comment.

The California SHPO shall be afforded thirty (30) days after receipt to comment on any documentation submitted by the Navy as a result of consultation efforts or otherwise the result of implementation of this agreement. Should the California SHPO decline to participate or fail to respond within thirty (30) days to a written request for comments, the Navy shall continue to consult with the Council to complete its responsibilities for the specific action.

X. Annual Report and Review.

A. Prior to the transfer or conveyance of the property the Navy shall provide an annual report to the Council, California SHPO, and the City on or before December 15 of each year, addressing following topics:

1. status of the National Register boundary change,
2. identification of historic properties leased, transferred or conveyed to others,
3. identification and explanation of any problems or unexpected issues encountered during the previous year.

XI. Resolving Objections.

A. Should any party to this agreement object to any action carried out or proposed by the Navy with respect to the implementation of this agreement, the Navy shall consult with the objecting party to resolve the objection. If, after entering into such consultation, the Navy determines that the objection cannot be resolved through consultation directly with the objecting party, the Navy shall forward all relevant documentation to the Council, including the Navy's proposed response to the objection. The Council shall exercise one of the following options within 30 calendar days of receipt of all pertinent documentation:

1. advise the Navy in writing that the Council concurs with the Navy's proposed response and final decision, if so indicated, whereupon the Navy shall respond to the objecting party in writing; or
2. provide the Navy with written recommendations and/or comments, which the Navy shall take into account in reaching its final decision regarding its response to the objection in accordance with 36 CFR 800.6; or
3. notify the Navy in writing that the Council will provide written comments within a specified time frame pursuant to 36 CFR 800.6. The resulting comments shall be taken into account by the Navy in accordance with 36 CFR 800.6(c).

Should the Council fail to exercise one of the above options within 30 calendar days after receipt of all pertinent documentation, the Navy may assume the Council concurrence in the Navy's proposed response. In considering any party's comments, the Navy shall take into account any recommendation or comment with reference only to the subject of the objection. The Navy's responsibility to carry out all actions under this agreement that are not the subject of the objection shall remain unchanged and shall be executed accordingly.

B. At any time during implementation of the stipulations of this agreement, should an objection(s) pertaining to this agreement be raised by a member of the public, the Navy shall notify in writing the signatory parties to this agreement and take the objection into account. The Navy shall consult with the objector and, if requested by the objector, consult with any or all of the signatory parties to this agreement with respect to the objection.



XII. Amendments.

Any party to this agreement may propose, in writing, to the Navy that the terms and/or stipulations of this agreement be amended. The Navy shall consult with the other parties to this agreement to consider such an amendment. 36 CFR 800.6(c)(7) shall govern the execution of any such amendment once agreed upon by all parties.

XIII. Anti-Deficiency Act. [Standard language required by the Navy]

a. All requirements set forth in this agreement requiring expenditure of Navy funds are expressly subject to the availability of appropriations and the requirements of the Anti-Deficiency Act (31 U.S.C. Section 1341). No obligation undertaken by the Navy under the terms of this Agreement shall require or be interpreted to require a commitment to expend funds not appropriated for a particular purpose.

b. If the Navy cannot perform any obligation set forth in this agreement because of the unavailability of funds, the Navy, California SHPO, City, and Council intend that the remainder of the agreement be executed. Any obligation under the agreement that cannot be performed because of the unavailability of funds must be renegotiated between the Navy, California SHPO, City and Council.

Execution of this agreement by the Navy, Council, and California SHPO, and subsequent implementation of its terms, shall be evidence that the Navy has afforded the Council an opportunity to comment on the Navy's undertakings and its effects on historic properties in accordance with Section 106 of the National Historic Preservation Act and its implementing regulations contained in 36 CFR Part 800.

UNITED STATES NAVY, ENGINEERING FIELD ACTIVITY WEST, San Bruno, CA.

BY: \_\_\_\_\_ Date: \_\_\_\_\_  
Print Name of Title of Signer: \_\_\_\_\_

ADVISORY COUNCIL ON HISTORIC PRESERVATION

BY: \_\_\_\_\_ Date: \_\_\_\_\_  
Print Name & Title of Signer: \_\_\_\_\_

CALIFORNIA STATE HISTORIC PRESERVATION OFFICER

BY: \_\_\_\_\_ Date: \_\_\_\_\_  
Print Name & Title of Signer: \_\_\_\_\_

Memorandum of Agreement  
NFD Point Molate - Disposal  
Page 7

CONCUR:  
CITY OF RICHMOND

BY: \_\_\_\_\_ Date: \_\_\_\_\_  
Print Name & Title of Signer: \_\_\_\_\_



## ORDINANCE NO. 24-82 N.S.

## AN ORDINANCE AMENDING THE RICHMOND MUNICIPAL CODE BY ADDING THERETO CHAPTER 6.06 ENTITLED HISTORIC STRUCTURES.

The Council of the City of Richmond do ordain as follows:

Section 1. Chapter 6.06 is hereby added to the Municipal Code of the City of Richmond (hereinafter referred to as RMC) consisting of Sections 6.06.010 to 6.06.120, inclusive thereto, said sections to read:

6.06.010 Title. This chapter shall be known as the "Historic or Architecturally Significant Structures Ordinance of the City of Richmond" and may be so cited and pleaded.

6.06.020 Purpose. It is hereby declared as a matter of public policy that the recognition, preservation, enhancement, perpetuation and use of structures within the City of Richmond having special historic, architectural or social significance is required in the interest of the health, economic prosperity, cultural enrichment and general welfare of the people. The purpose of Sections 6.06.010 through 6.06.120 is to:

1. Allow the application of alternate building regulations to facilitate the restoration and productive use of buildings having special historical, architectural or social significance so as to preserve their original architectural elements and features, yet provide for the safety of the building occupants and the community.
2. Safeguard the heritage of the City by providing for the protection of landmarks representing significant elements of its history.
3. Foster public appreciation of, and civic pride in the beauty of the City and the accomplishments of its past.
4. Strengthen the economy of the City by protecting and enhancing the City's attractions to residents, tourists and visitors.
5. Stabilize and improve property values within the City.

6.06.030 Applicability and Limitations. At the discretion of the Superintendent of Inspection Services the provisions contained in any or all of the following codes may be authorized for the development or use of any property designated by the City as an Historic or Architecturally Significant Structure:

1. Subsection (f) entitled Historic Buildings, of Section 104 of the Uniform Building Code, 1979 Edition adopted by the City of Richmond on June 16, 1982 or as may be subsequently adopted; and
2. Title 24 of the California Administrative Code, Part 8 entitled State Historical Building Code; or
3. Part 2.7 entitled State Historic Building Code contained in Sections 18950 et seq. of the California Health and Safety Code.

Consistent with these provisions, compliance with Chapters 6.04 and 8.16 of the Richmond Municipal Code may be waived by the Superintendent of Inspection Services.

6.06.040 Historic Structure Defined. Historic Structure is a building or structure of historical significance due to its association with such things as noted past events, historical persons, or distinguishing architectural characteristics designated by the City Council of the City of Richmond as having special historical or special architectural significance pursuant to this Chapter.

6.06.050 Criteria for Designating Historic Structures. The City Council shall utilize historical, architectural and social significances as general categories containing specific criteria as set forth below in determining whether a building or structure which is at least fifty (50) years old is worthy of being designated as an Historic Structure.

1. Historical Significance.

- a. Structure offers tangible association with significant person-ages, ideas, events and/or historical changes.
- b. Structure is particularly illustrative of an important aspect of an era.
- c. Structure offers one of a few remaining examples illustrative of an important aspect of an era.
- d. Structure assists well in visually illuminating the evolution of development in Richmond.

2. Architectural Significance.

- a. Structure was designed by individual of note of which little work remains or for which this structure is important in illustrating the evolution of the designers work.
- b. Structure is a particularly striking and/or unique structure from a visual and/or architectural standpoint.
- c. Structure is an archtype of construction method, structural technique and/or architectural style.
- d. Structure plays an important role as visual element of an important larger collection of structures.
- e. Structure exhibits a distinguishing quality of construction, workmanship and/or materials.
- f. Structure represents, well, a period or style of architectural treatment.
- g. Structure offers one of few remaining examples of a period or style of architectural treatment.
- h. Structure due to its physical location and/or architectural form is a particularly prominent visual feature.

3. Social Significance.

- a. Structure is a significant social symbol or landmark.
- b. Structure houses or facilitates significant social function(s) which is difficult or unlikely to be replaced.
- c. Structure plays an important role in a larger pattern of significant social interaction.

The City Council shall make a finding that a criterion from at least two (2) of the three (3) categories of significance apply in order for a structure to qualify for a Historic Structure designation.

6.06.060 Approved Controlled Development Plan Required. After a structure has been designated as an Historic Structure, any expansion or rehabilitation of such an existing structure, must be in conformance with a Controlled Development Plan which has been approved by the Planning Commission pursuant to the provisions of Subsection C entitled Administration of Section 15.04.150 of this RMC. An application for a Controlled Development Plan shall be filed with the Planning Department.

In approving a Controlled Development Plan the Planning Commission, in accordance with the overall purposes and standards of the Zoning Ordinance, shall find the types of expansion or rehabilitation proposed are wholly in keeping with statements of purpose in Section 6.06.020 above. The Planning Commission may impose special requirements and permit variations from the regular zone requirements, pursuant to the provisions of Subsection B entitled Special Controls of Section 15.04.150 of this RMC. In making the finding stated above and in approving said plan, the Planning Commission may impose special requirements in respect to revisions in the design of structures and the placement of such structures and related open spaces for a proposed expansion or rehabilitation particularly in reference, but not limited thereby, to the Standards for Rehabilitation specified in Section 6.06.070 below.

6.06.070 Standards for Rehabilitation. The following Standards for Rehabilitation are broadly worded to serve as a guide to the Planning Commission in their consideration of Controlled Development Plan applications as specified in Section 6.06.060:

1. Every reasonable effort shall be made to provide a compatible use for a property which requires minimal alterations of the building, structure, or site and its environment, or to use a property for its originally intended use.

2. The distinguishing original qualities or character of a building, structure, or site and its environment, shall not be destroyed. The removal or alteration of any historic material or distinctive architectural features should be avoided when possible.

3. All buildings, structures, and sites shall be recognized as products of their own time. Alterations that have no historic basis and which seek to create an earlier appearance shall be discouraged.

4. Changes which may have taken place in the course of time are evidence of the history and development of a building, structure, or site and its environment. These changes may have acquired significance in their own right, and this significance shall be recognized and respected.

5. Distinctive stylistic features or examples of skilled craftsmanship which characterize a building, structure, or site shall be treated with sensitivity.

6. Deteriorated architectural features shall be repaired rather than replaced, wherever possible. In the event replacement is necessary, the new material should match the material being replaced in composition, design, color, texture, and other visual qualities. Repair or replacement of missing architectural features should be based on accurate duplications rather than on conjectural designs or the availability of different architectural elements from other buildings or structures.

7. The surface cleaning of structures shall be undertaken with the gentlest means possible. Sandblasting and other cleaning methods that will damage the historic building materials shall not be undertaken.

8. Every possible effort shall be made to protect and preserve archeological resources affected by, or adjacent to any rehabilitation project.

9. Contemporary design for alterations and additions to existing properties shall not be discouraged when such alterations and additions do not destroy significant historical, architectural, or cultural material, and such design is compatible with the size, scale, color, material, and character of the property, neighborhood or environment.

10. Wherever possible, new additions or alterations to structures shall be done in such a manner that if such additions or alterations were to be removed in the future, the essential form and integrity of the structure would be unimpaired.

6.06.080 Requirements for Restoration, Rehabilitation, or Repair of Historic Structures.

1. Restoration, rehabilitation, or repair of Historic Structures shall comply with all of the provisions of this chapter, or with deviations from such provisions, as provided herein.

2. Repairs, alterations, and additions necessary for the preservation, restoration, rehabilitation, or continued use of a Historic Structure may be made without limitation on value and without conformance with other requirements of Chapter 6.04 of this RMC, to the extent authorized by the Superintendent of Inspection Services, provided:

- a. Any conditions which cause the structure to be unsafe, as defined in Section 203, are remedied as provided therein. For those structures which may be unsafe because they are without the level of earthquake resistance specified in Section 2312, remedy of this particular condition may be deferred up to ten (10) years.

provided the owner records an agreement acceptable to the City not to change the character of use of the structure, as approved by the Superintendent of Inspection Services, so as to increase fire or life risk to the occupants during this period. The Superintendent of Inspection Services shall make the evaluation and determination of fire and life risk by considering those factors specified in Subsection 3.

- b. The number and total width of exits as required by the State Historic Building Code based upon the character of use, occupant load, and number of stories, are provided.
  - c. Corridors are protected and shafts and other vertical openings through floors are enclosed as required by the State Historic Building Code, or are provided with protection against the spread of fire and smoke determined by the Superintendent of Inspection Services to be reasonably equivalent.
  - d. Exit signs and illumination, as required by the State Historic Building Code, are provided.
  - e. Exit doors are openable from the inside without the use of a key or any special knowledge or effort, except as provided in the State Historic Building Code.
  - f. Structures that exceed the allowed height and/or area or do not meet the minimum fire resistance as required by the State Historic Building Code, shall be provided with a complete automatic sprinkler system, or other suitable alternatives as determined by the Superintendent of Inspection Services.
  - g. Occupancy separations, shall be equivalent to those required by the State Historic Building Code, are provided.
  - h. Rooms or spaces containing boilers or central heating equipment are separated from the rest of the structure, as required by the State Historic Building Code.
  - i. Fire-detection, fire-alarm, and fire-extinguishing systems are provided when required by the State Historic Building Code.
  - j. The structure, when restored and rehabilitated, will, in the judgment of the Superintendent of Inspection Services, provide reasonable fire and life-safety to its occupants and the community.
3. The Superintendent of Inspection Services may, at his discretion, authorize a change in the character of use or occupancy of a Historic Structure with such changes, alterations, or additions as it deems necessary to provide reasonable fire and life-safety, and under the conditions provided in Subsection 2. In making the determination, the Superintendent of Inspection Services shall consider the following:
- a. The occupant loads of the new use.
  - b. The probable combustible material loadings for the new use.
  - c. The extent of hazardous operations and handling or use of flammable or explosive materials in the new use.
  - d. The vertical and lateral forces imposed on the structure by materials and occupants in the new use.
  - e. Any other factors which are pertinent.

Excepting however, changes to residential R-1 occupancy shall not be allowed under provisions of the State Historic Building Code.

6.06.090 Historic Structure Application Including Compliance Survey Inspection Request.

An applicant requesting designation of a building or structure as an Historic Structure as defined herein for purposes of restoration, rehabili-

tation, or repair of said structure pursuant to these sections shall file with the Planning Department an Historic Structure Application. This application includes a request for a Compliance Survey Inspection as provided in this chapter and shall be filed prior to submission of a building permit application, plans, and specifications. A Historic Structure Application shall contain the data presented and described in sufficient detail to enable the City to apply readily the criteria for selection as an historical or architectural-ly significant structure and to conduct the Compliance Survey Inspection. Substantiating documents concerning the structure's historic and architectural significance, the requisite plot plan, site details, preliminary building plans and specifications provided by a licensed architect defining the work necessary to make the proposed Historic Structure comply with the requirements of the State Historic Building Code including elevations, site elevations, parking and traffic layout, screening and lighting, sign installation, building materials and time sequence, and any other reasonably related information necessary for the City Council to act shall be submitted as part of the application.

If required by the Superintendent of Inspection Services, a structural survey report by a structural engineer shall be submitted by the applicant as part of the Historic Structure Application. Such report shall conform to the requirements of Chapter 6.04 of this RMC, shall indicate clearly whether or not the building is an unsafe structure, and shall indicate any corrective measures where appropriate.

An Historic Structure Application shall be considered as having been filed when the Planning Director notifies the applicant or his representative in writing that the Historic Structure Application submitted is complete.

#### 6.06.100 Filing and Processing Fee for an Historic Structure.

A filing and processing fee shall be paid in the amount and manner as set by resolution of the City Council.

#### 6.06.110 City Council Action.

Any building or structure may be designated as a Historic Structure as defined in this chapter if the City Council finds that it meets the selection criteria specified in Section 6.06.060 and complies with the State Historic Building Code as shown by the Compliance Survey Inspection. If the City Council has not acted upon the application within sixty (60) days from the date of completed application notice, the application will be considered to be disapproved, unless continued by mutual consent of applicant and City Council.

In considering the application, the City Council may approve, approve and attach any reasonable conditions, or disapprove such designation. The City Council may continue the matter for study for a reasonable period of time.

#### 6.06.120 Completion of the Project.

Upon satisfactory completion of all work required for rehabilitation pursuant to these sections, the Superintendent of Inspection Services may issue a Certificate of Occupancy.



Section 2. This ordinance shall take effect and be in force on or after its final passage and adoption.

First read at a regular meeting of the Council of the City of Richmond held October 4, 1982, and finally passed and adopted as read at a regular meeting thereof held October 12, 1982 by the following vote:

Ayes: Councilmen Washington, Greco, Griffin, Livingston, and Mayor Corcoran.

Noes: None.

Absent: Councilmen Silva, Bates, Wagerman, and Ziesenhenné.

HARLAN J. HEYDON  
Clerk of the City of Richmond

(SEAL)

Approved:

THOMAS J. CORCORAN  
Mayor

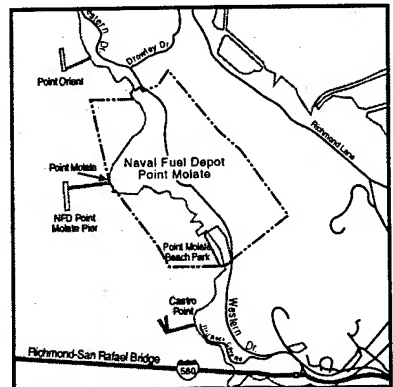
Approved as to form:

MALCOLM HUNTER  
City Attorney

Certified as a True Copy

*Harlan J. Heydon*  
CLERK OF THE CITY OF RICHMOND, CALIF.

## E.3 Biological Resources



**TABLE E.3-1**  
**ANIMAL SPECIES POTENTIALLY OCCURRING AT NFD POINT MOLATE**

<b>Invertebrates (not enough data is available to determine scientific names)</b>			
<b>Common Name</b>	<b>Common Name</b>	<b>Common Name</b>	<b>Common Name</b>
anemone	limpet	copepod	oyster
barnacle	mussel	crab*	ribbon worm
beach hopper	nudibranch	flatworm	sea spider
chiton	octopus	hydrozoa	segmented worm*
clam	oppossum shrimp	jellyfish	shrimp
leech			
<b>Fish</b>			
<b>Common Name</b>	<b>Scientific Name</b>	<b>Common Name</b>	<b>Scientific Name</b>
American shad	<i>Alosa sapidissima</i>	diamond turbot	<i>Hypsopsetta guttulata</i>
topsmelt	<i>Atherinops affinis</i>	striped bass	<i>Morone saxatilis</i>
jack smelt	<i>Atherinopsis californiensis</i>	brown smoothhound	<i>Mustelus henlei</i>
Pacific herring	<i>Clupea pallasii</i>	bat ray	<i>Myliobatis californica</i>
sculpin	<i>Cottus sp.</i>	chinook salmon	<i>Oncorhynchus tshawytscha</i>
shiner surfperch	<i>Cymatogaster aggregata</i>	English sole	<i>Parophrys vetulus</i>
pile surfperch	<i>Damalichthys oacca</i>	starry flounder	<i>Platyichthys stellatus</i>
threadfin shad	<i>Dorosoma petenense</i>	stand sole	<i>Psettichthys melanostictus</i>
black surfperch	<i>Embiotoca jacksoni</i>	steelhead trout	<i>Salmo gairdneri</i>
Pacific cod	<i>Gadus macrocephalus</i>	brown rockfish	<i>Sebastes sp.</i>
threespine stickleback	<i>Gasterosteus aculeatus</i>	spiny dogfish	<i>Squalus acanthias</i>
white croaker	<i>Genyonemus lineatus</i>	bay pipefish	<i>Syngnathus leptorhynchus</i>
		leopard shark	<i>Triakis semifasciata</i>
<b>Amphibians</b>			
<b>Common Name</b>	<b>Scientific Name</b>	<b>Common Name</b>	<b>Scientific Name</b>
arboreal salamander	<i>Aneides lugubris</i>	western toad	<i>Bufo boreas</i>
slender salamander	<i>Batrachoseps attenuatus</i>	ensatina	<i>Ensatina eschscholtzi</i>
		Pacific chorus frog	<i>Hyla regilla</i>
<b>Reptiles</b>			
<b>Common Name</b>	<b>Scientific Name</b>	<b>Common Name</b>	<b>Scientific Name</b>
racer	<i>Coluber constrictor</i>	southern alligator lizard	<i>Gerrhonotus multicarinatus</i>
sharp-tailed snake	<i>Contia tenuis</i>	gopher snake	<i>Pituophis melanoleucus</i>
western rattlesnake	<i>Crotalus viridis</i>	western fence lizard*	<i>Sceloporus occidentalis</i>
ring-necked snake	<i>Diadophis punctatus</i>	aquatic garter snake	<i>Thamnophis couchi</i>
northern alligator lizard	<i>Gerrhonotus coeruleus</i>	terrestrial garter snake	<i>Thamnophis elegans</i>
<b>Birds</b>			
<b>Common Name</b>	<b>Scientific Name</b>	<b>Common Name</b>	<b>Scientific Name</b>
Cooper's hawk	<i>Accipiter cooperi</i>	great horned owl	<i>Bubo virginiana</i>
sharp-shinned hawk	<i>Accipiter striatus</i>	bufflehead	<i>Bucephala albeola</i>
spotted sandpiper	<i>Actitis macularia</i>	common goldeneye	<i>Bucephala clangula</i>
western grebe	<i>Aechmophorus occidentalis</i>	Barrow's goldeneye	<i>Bucephala islandica</i>
white-throated swift	<i>Acromautes saxatilis</i>	red-tailed hawk*	<i>Buteo jamaicensis</i>
red-winged blackbird	<i>Agelaius phoeniceus</i>	sanderling	<i>Calidris alba</i>
wood duck	<i>Aix sponsa</i>	dunlin	<i>Calidris alpina</i>
grasshopper sparrow	<i>Ammodramus savannarum</i>	red knot	<i>Calidris canutus</i>
northern pintail	<i>Anas acuta</i>	western sandpiper	<i>Calidris mauri</i>
American widgeon	<i>Anas americana</i>	least sandpiper	<i>Calidris minutilla</i>
northern shoveller	<i>Anas clypeata</i>	Anna's hummingbird	<i>Calypte anna</i>
green-winged teal	<i>Anas crecca</i>	lesser goldfinch	<i>Carduelis psaltria</i>
cinnamon teal	<i>Anas cyanoptera</i>	house finch	<i>Carpodacus mexicanus</i>
mallard*	<i>Anas platyrhynchos</i>	purple finch	<i>Carpodacus purpureus</i>
gadwall	<i>Anas strepera</i>	great egret	<i>Casmerodius albus</i>
scrub jay*	<i>Aphelocoma coerulescens</i>	turkey vulture*	<i>Cathartes aura</i>
great blue heron*	<i>Ardea herodias</i>	hermit thrush	<i>Catharus guttatus</i>
ruddy turnstone	<i>Arenaria interpres</i>	willet	<i>Catoptrophorus semipalmatus</i>
black turnstone	<i>Arenaria melanocephala</i>	brown creeper	<i>Certhia familiaris</i>
short-eared owl	<i>Asio flammeus</i>	wrentit	<i>Chamaea fasciata</i>
lesser scaup	<i>Aythya affinis</i>	snowy plover	<i>Charadrius alexandrinus</i>
redhead	<i>Aythya americana</i>	semipalmated plover	<i>Charadrius semipalmatus</i>
ring-necked duck	<i>Aythya collaris</i>	killdeer*	<i>Charadrius vociferus</i>
greater scaup	<i>Aythya marila</i>	Vaux's swift	<i>Cheaturon vauxi</i>
canvasback	<i>Aythya valisineria</i>	snow goose	<i>Chen caerulescens</i>
cedar waxwing	<i>Bombycilla cedrorum</i>	lark sparrow	<i>Chondestes grammacus</i>
American bittern	<i>Botaurus lentiginosus</i>	northern harrier	<i>Circus cyaneus</i>
Canada goose	<i>Branta canadensis</i>	marsh wren	<i>Cistothorus palustris</i>

**TABLE E.3-1**  
**ANIMAL SPECIES POTENTIALLY OCCURRING AT NFD POINT MOLATE**  
 (Continued)

<b>Birds(continued)</b>			
<b>Common Name</b>	<b>Scientific Name</b>	<b>Common Name</b>	<b>Scientific Name</b>
northern flicker	<i>Colaptes auratus</i>	plain titmouse	<i>Parus inornatus</i>
band-tailed pigeon	<i>Columba fasciata</i>	chestnut-backed chickadee	<i>Parus rufescens</i>
rock dove*	<i>Columba livia</i>	house sparrow	<i>Passer domesticus</i>
common crow*	<i>Corvus brachyrhynchos</i>	savannah sparrow	<i>Passerculus sandwichensis</i>
hermit warbler	<i>Dendroica occidentalis</i>	brown pelican	<i>Pelecanus occidentalis</i>
Townsend's warbler	<i>Dendroica townsendi</i>	double-crested cormorant*	<i>Phalacrocorax auritis</i>
snowy egret	<i>Egretta thula</i>	pelagic cormorant	<i>Phalacrocorax pelagicus</i>
fox sparrow	<i>Passerella iliaca</i>	Brandt's cormorant	<i>Phalacrocorax penicillatus</i>
black-shouldered kite	<i>Elanus leucurus</i>	ring-necked pheasant	<i>Phasianus colchicus</i>
western flycatcher	<i>Empidonax difficilis</i>	black-headed grosbeak	<i>Pheucticus melanocephalus</i>
horned lark	<i>Eremophila alpestris</i>	downy woodpecker	<i>Picoides pubescens</i>
Brewer's blackbird*	<i>Euphagus cyanocephalus</i>	rufous-sided towhee	<i>Pipilo erythrophthalmus</i>
American kestrel	<i>Falco sparverius</i>	brown towhee	<i>Pipilo fuscus</i>
American coot	<i>Fulica americana</i>	black-bellied plover	<i>Pluvialis squatarola</i>
common snipe	<i>Gallinago gallinago</i>	horned grebe	<i>Podiceps auritus</i>
common loon	<i>Gavia immer</i>	red-necked grebe	<i>Podiceps grisegena</i>
red-throated loon	<i>Gavia stellata</i>	piebilled grebe	<i>Podilymbus podiceps</i>
black oystercatcher	<i>Haematopus bachmani</i>	sora	<i>Porzana carolina</i>
cliff swallow*	<i>Hirundo pyrrhonota</i>	bushtit	<i>Psaltiriparus minimus</i>
barn swallow	<i>Hirundo rustica</i>	Virginia rail	<i>Rallus limicola</i>
Bullock's oriole	<i>Icterus galbula</i>	California clapper rail	<i>Rallus longirostris</i>
dark-eyed junco*	<i>Junco hyemalis</i>	American avocet	<i>Recurvirostra americana</i>
loggerhead shrike	<i>Lanius ludovicianus</i>	ruby-crowned kinglet	<i>Regulus calendula</i>
herring gull*	<i>Larus argentatus</i>	black phoebe	<i>Sayornis nigricans</i>
California gull	<i>Larus californicus</i>	rufous hummingbird	<i>Selasphorus rufus</i>
mew gull	<i>Larus canus</i>	Allen's hummingbird*	<i>Selasphorus sasin</i>
glaucous-winged gull	<i>Larus glaucescens</i>	American goldfinch	<i>Spinus tristis</i>
Heerman's gull	<i>Larus heermanni</i>	least tern	<i>Sterna antillarum</i>
western gull*	<i>Larus occidentalis</i>	Caspian tern	<i>Sterna caspia</i>
Bonaparte's gull	<i>Larus philadelphia</i>	Forster's tern	<i>Sterna forsteri</i>
short-billed dowitcher	<i>Limnodromus griseus</i>	western meadowlark	<i>Sturnella neglecta</i>
long-billed dowitcher	<i>Limnodromus scolopaceus</i>	starling	<i>Sturnus vulgaris</i>
marbled godwit	<i>Limosa fedon</i>	violet-green swallow	<i>Tachycineta thalassina</i>
hooded merganser	<i>Lophodytes cucullatus</i>	Bewick's wren	<i>Thryomanes bewickii</i>
California quail	<i>Lophortyx californicus</i>	California thrasher	<i>Toxostoma redivivum</i>
belted kingfisher	<i>Megasceryle alcyon</i>	greater yellowlegs	<i>Tringa melanoleuca</i>
white-winged scoter	<i>Melanitta fusca</i>	robin	<i>Turdus migratorius</i>
surf scoter	<i>Melanitta perspicillata</i>	barn owl	<i>Tyto alba</i>
song sparrow	<i>Melospiza melodia</i>	orange-crowned warbler	<i>Vermivora celata</i>
red-breasted merganser	<i>Mergus serrator</i>	Hutton's vireo	<i>Vireo linnii</i>
northern mockingbird*	<i>Mimus polyglottos</i>	Wilson's warbler	<i>Wilsonia pusilla</i>
brown-headed cowbird	<i>Molothrus ater</i>	mourning dove	<i>Zenaidura macroura</i>
long-billed curlew	<i>Numenius americanus</i>	gold-crowned sparrow	<i>Zonotrichia atricapilla</i>
whimbrel	<i>Numenius phaeopus</i>	white-crowned sparrow	<i>Zonotrichia leucophrys</i>
black-crowned night heron*	<i>Nycticorax nycticorax</i>		

<b>Mammals</b>			
<b>Common Name</b>	<b>Scientific Name</b>	<b>Common Name</b>	<b>Scientific Name</b>
feral dog	<i>Canis familiaris</i>	Norway rat	<i>Rattus norvegicus</i>
coyote*	<i>Canis latrans</i>	black rat	<i>Rattus rattus</i>
opossum	<i>Didelphis marsupialis</i>	western harvest mouse	<i>Reithrodontomys megalotis</i>
feral cat*	<i>Felis domesticus</i>	salt marsh harvest mouse	<i>Reithrodontomys raviventris</i>
black-tailed hare*	<i>Lepus californicus</i>	California mole	<i>Scapanus latimanus</i>
striped skunk	<i>Mephitis mephitis</i>	eastern fox squirrel	<i>Sciurus niger</i>
California vole	<i>Merotus californicus</i>	California ground squirrel*	<i>Spermophilus beecheyi</i>
house mouse	<i>Mus musculus</i>	spotted skunk	<i>Spilogale putorius</i>
dusky-footed woodrat	<i>Neotoma fuscipes</i>	brush rabbit	<i>Sylvilagus bachmanii</i>
mule deer*	<i>Odocoileus hemionus</i>	Mexican free-tailed bat	<i>Tadarida brasiliensis</i>
deer mouse	<i>Peromyscus maniculatus</i>	Botta's pocket gopher	<i>Thomomys bottae</i>
harbor seal	<i>Phoca vitulina</i>	gray fox	<i>Urocyon cinereoargenteus</i>
raccoon	<i>Procyon lotor</i>	red fox	<i>Vulpes vulpes</i>

Source: U.S. Navy 1998d.

\* observed during surveys

**TABLE E.3-2**  
**THREATENED AND ENDANGERED ANIMAL SPECIES POTENTIALLY**  
**OCCURRING AT NFD POINT MOLATE**

Common Name	Scientific Name	Federal Status	State Status	Occurrence at Point Molate
<b>Fish</b>				
winter-run chinook salmon	<i>Oncorhynchus tshawytscha</i>	T	E	O
tidewater goby	<i>Eucyclogobius newberryi</i>	E	CSC	U
<b>Amphibians</b>				
California red-legged frog	<i>Rana aurora draytonii</i>	T	CSC	U
<b>Reptiles</b>				
Alameda whipsnake	<i>Masticophis lateralis euryxanthus</i>	T	T	U
<b>Birds</b>				
California brown pelican (nesting colony)	<i>Pelecanus occidentalis californicus</i>	E	E	O
American peregrine falcon	<i>Falco peregrinus anatum</i>	E	E	O
California black rail	<i>Laterallus jamaicensis coturniculus</i>	SC	T	U
California clapper rail	<i>Rallus longirostris</i>	E	E	U
California least tern (nesting colony)	<i>Sterna antillarum browni</i>	E	E	O
western snowy plover (breeding)	<i>Charadrius alexandrinus nivosus</i>	T	CSC	O
<b>Mammals</b>				
salt marsh harvest mouse	<i>Reithrodontomys raviventris</i>	E	E	U

Sources: CDFG 1989; 1994a; 1994b; 1994c; 1995a; 1995b; Nature Conservancy 1994; USFWS 1993; 1994a; 1994b; 1995a; 1995b.

Federal Status

E = Endangered  
T = Threatened  
SC = Species of concern

State Status

E = Endangered  
T = Threatened  
CSC = California species of special concern

Occurrence at Point Molate

O = Possible occasional visitor  
U = Unlikely

**TABLE E.3-3  
OTHER SENSITIVE SPECIES FOUND WITHIN A ONE-MILE RADIUS  
OF NFD POINT MOLATE**

Common Name	Scientific Name	Federal Status	State Status
<b>Invertebrates</b>			
Marin elfin butterfly	<i>Incisalia mossii</i>	SC	none
Rickseeker's water scavenger beetle	<i>Hydrochara rickseekeri</i>	SC	none
opler's longhorn moth	<i>Adella operella</i>	SC	none
San Francisco lacewing	<i>Nothochrysa californica</i>	SC	none
Bridge's Coast Range shoulderband	<i>Helminthoglypa nickliniana bridgesi</i>	SC	none
<b>Fish</b>			
green sturgeon	<i>Aeipenser medirostris</i>	SC	none
<b>Amphibians and Reptiles</b>			
California tiger salamander	<i>Ambystoma tigrinum californiense</i>	C	CSC
northwestern pond turtle	<i>Clemmys marmorata marmorata</i>	SC	CSC
southwestern pond turtle	<i>Clemmys marmorata pallida</i>	SC	CSC
<b>Birds</b>			
Barrow's goldeneye (breeding)	<i>Bucephala islandica</i>	none	CSC
long billed curlew (breeding)	<i>Numenius americanus</i>	none	CSC
Caspian tern (nesting colony)	<i>Sterna caspia</i>	none	CSC
double crested cormorant (rookery)	<i>Phalacrocorax auritus</i>	none	CSC
osprey (nesting)	<i>Pandion haliaetus</i>	none	CSC
Cooper's hawk (nesting)	<i>Accipter cooperi</i>	none	CSC
sharp shinned hawk (nesting)	<i>Accipter straitus</i>	none	CSC
black shouldered kite (nesting)	<i>Elanus caruteus</i>	none	CSC
northern harrier (nesting)	<i>Circus cyaneus</i>	none	CSC
short eared owl (nesting)	<i>Asio flammeus</i>	none	CSC
burrowing owl	<i>Athene cunicularia</i>	none	CSC
loggerhead shrike	<i>Lanus ludovicianus</i>	SC	CSC
tricolored blackbird	<i>Agelaius tricolor</i>	SC	CSC
salt marsh common yellow throat	<i>Geothlypis trichas sinuosa</i>	SC	CSC
Alameda song sparrow	<i>Melospiza melodia pusillula</i>	SC	CSC
<b>Mammals</b>			
salt marsh wandering shrew	<i>Sorex vagrans haliceotes</i>	C	CSC
long eared myotis	<i>Myotis evotis</i>	SC	CSC
fringed myotis	<i>Myotis thysanodes</i>	SC	CSC
long legged myotis	<i>Myotis volans</i>	SC	CSC
townsend's big eared bat	<i>Plecotus townsendii townsendii</i>	SC	CSC
California mastiff bat	<i>Eumops perotis californicus</i>	SC	CSC
San Pablo vole	<i>Microtus californicus sanpablensis</i>	SC	CSC
San Francisco dusky footed woodrat	<i>Neotoma fuscipes annectans</i>	SC	CSC

Sources: CDFG 1989; 1994a; 1994b; 1994c; 1995a; 1995b; Nature Conservancy 1994; USFWS 1993; 1994a; 1994b; 1995a; 1995b.

**Federal Status**

C = Candidate for listing as  
threatened or endangered  
SC = Species of concern

**State Status**

CSC = California species of special  
concern

**TABLE E.3-4**  
**PLANT SPECIES DETECTED AT NFD POINT MOLATE**

<b>CLASS</b> <b>Family</b> <b>Scientific Name</b>	<b>Common Name</b>
<b>FILICINAE</b>	
<i>Dennstaedtiaceae</i> - Bracken Family <i>Pteridium aquilinum</i> var. <i>pubescens</i>	western brackenfern
<i>Dryopteridaceae</i> - Fern family <i>Cystopteris fragilis</i> ? <i>Dryopteris arguta</i> <i>Polystichum munitum</i>	fragile fern wood fern western sword fern
<i>Polypodiaceae</i> - Fern Family <i>Polypodium calirhiza</i>	polypody
<i>Pteridaceae</i> - Fern Family <i>Adiantum jordanii</i> <i>Pellaea andromedaefolia</i> <i>Pentagramma triangularis</i> ssp. <i>triangularis</i>	maidenhair fern coffee fern goldback fern
<b>CONIFERAE</b>	
<i>Cupressaceae</i> - Cypress Family <i>Chamaecyparis lawsonii</i> * <i>Cupressus arizonica</i> ssp. <i>arizonica</i> * <i>Cupressus macrocarpa</i> * <i>Juniperus</i> sp. *	Port Orford cedar Arizona cypress Monterey cypress juniper
<i>Pinaceae</i> - Pine Family <i>Pinus canariensis</i> * <i>Pinus halepensis</i> * <i>Pinus pinea</i> * <i>Pinus radiata</i> * <i>Pseudotsuga menziesii</i> *	Canary Island pine aleppo pine Italian stone pine Monterey pine Douglas-fir
<b>DICOTYLEDONAE</b>	
<i>Acanthaceae</i> - Acanthus Family <i>Acanthus mollis</i> *	bears breech
<i>Aceraceae</i> - Maple Family <i>Acer</i> sp. *	maple
<i>Aizoaceae</i> - Carpetweed Family <i>Carpobrotus edulis</i> *	Hottentot fig
<i>Tetragonia tetragonioides</i> *	New Zealand spinach
<i>Amaranthaceae</i> -Amaranth Family <i>Amaranthus</i> sp.*	pigweed
<i>Anacardiaceae</i> - Sumac Family <i>Toxicodendron diversilobum</i>	poison oak
<i>Apiaceae</i> - Parsley Family <i>Anthriscus caucalis</i> * <i>Daucus pusillus</i> <i>Foeniculum vulgare</i> * <i>Heracleum lanatum</i> <i>Osmorhiza chilensis</i> <i>Perideridia kelloggii</i> <i>Sanicula bipinnatifida</i> <i>Sanicula crassicaulis</i> <i>Torilis arvensis</i> *	bur-chervil rattlesnake weed sweet fennel cow parsnip sweet-cicely Kellogg's yampah purple sanicle Pacific sanicle hedge-parsley
<i>Apocynaceae</i> - Dogbane Family <i>Nerium oleander</i> * <i>Vinca major</i> *	common oleander periwinkle

**TABLE E.3-4**  
**PLANT SPECIES DETECTED AT NFD POINT MOLATE**  
 (Continued)

<b>CLASS</b>	
<b>Family</b>	
<b>Scientific Name</b>	<b>Common Name</b>
<i>Araliaceae - Aralia Family</i>	
<i>Hedera helix*</i>	English ivy
<i>Aristolochiaceae - Birthwort Family</i>	
<i>Aristolochia californica</i> <sup>2</sup>	Dutchman's pipevine
<i>Asteraceae - Sunflower Family</i>	
<i>Achillea millefolium</i>	yarrow
<i>Agoseris grandiflora</i>	California dandelion
<i>Anthemis cotula*</i>	dog mayweed
<i>Artemisia californica</i>	California sagebrush
<i>Artemisia douglasiana</i>	mugwort
<i>Aster chilensis</i>	common California aster
<i>Aster radulinus</i>	rough-leaved aster
<i>Baccharis douglasii</i>	marsh baccharis
<i>Baccharis pilularis</i>	coyote brush
<i>Carduus pycnocephalus*</i>	Italian thistle
<i>Carduus tenuiflorus*</i>	slender-flowered thistle
<i>Centaurea calcitrapa*</i>	purple star-thistle
<i>Centaurea solstitialis*</i>	yellow star-thistle
<i>Cirsium quercetorum</i> <sup>2</sup>	brownie thistle
<i>Cirsium remotifolium</i> <sup>2</sup> ?	remote-leaved thistle
<i>Cirsium vulgare*</i>	bull thistle
<i>Conyza bilboana</i>	horseweed
<i>Conyza canadensis*</i>	horseweed
<i>Cotula australis*</i>	Australian brass-buttons
<i>Cotula coronopifolia*</i>	African brass-buttons
<i>Cynara cardunculus*</i>	artichoke thistle
<i>Erechtites glomerata*</i>	cut-leaved coast fireweed
<i>Eriophyllum confertiflorum</i> var. <i>confertiflorum</i>	golden-yarrow
<i>Eriophyllum staechadifolium</i> <sup>2</sup>	seaside woolly-sunflower
<i>Filago gallica*</i>	narrow-leaf filago
<i>Gnaphalium bicolor</i>	bicolor cudweed
<i>Gnaphalium californicum</i>	California everlasting
<i>Gnaphalium canescens</i> ssp. <i>beneolens</i> <sup>2</sup>	fragrant everlasting
<i>Gnaphalium luteo - album*</i>	cudweed
<i>Gnaphalium purpureum</i>	purple cudweed
<i>Gnaphalium ramosissimum</i>	pink everlasting
<i>Grindelia hirsutula</i> var. <i>hirsutula</i>	hirsute grindelia
<i>Grindelia stricta</i> var. <i>angustifolia</i> <sup>1,2</sup>	marsh gum-plant
<i>Hedypnois cretica*</i>	Crete hedypnois
<i>Helenium puberulum</i>	sneezeweed
<i>Hemizonia fitchii</i>	Fitch's spikeweed
<i>Hemizonia pungens</i> ssp. <i>pungens</i>	common spikeweed
<i>Heterotheca grandiflora</i>	telegraph weed
<i>Hypochaeris glabra*</i>	smooth cat's-ear
<i>Hypochaeris radicata*</i>	rough cat's-ear
<i>Iva axillaris</i> ssp. <i>robustior</i>	poverty weed
<i>Jaumea carnosa</i>	jaumea
<i>Lactuca serriola*</i>	prickly lettuce
<i>Madia anomala</i> <sup>2</sup> ? +	plump-seeded madia
<i>Madia gracilis</i>	slender tarweed
<i>Madia sativa</i>	coast tarweed
<i>Micropus californicus</i> var. <i>californicus</i>	sleder cottonweed



**TABLE E.3-4**  
**PLANT SPECIES DETECTED AT NFD POINT MOLATE**  
 (Continued)

CLASS Family Scientific Name	Common Name
<i>Asteraceae - Sunflower Family (Continued)</i> <i>Picris echioides</i> * <i>Psilocarphus tenellus</i> var. <i>tenellus</i> <i>Senecio vulgaris</i> * <i>Silybum marianum</i> * <i>Solidago californica</i> <i>Soliva sessilis</i> * <i>Sonchus asper</i> * <i>Sonchus oleraceus</i> * <i>Stephanomeria virgata</i> ssp. <i>pleurocarpa</i> <i>Tragopogon porrifolius</i> * <i>Uropappus lindleyi</i> <i>Wyethia angustifolia</i> <i>Xanthium strumarium</i> *	bristly ox-tongue woolly-heads common groundsel milk-thistle California goldenrod common soliva prickly sow-thistle common sow thistle tall stephanomeria salsify silver puffs narrowleaf mule-ears eastern cocklebur
<i>Boraginaceae - Borage Family</i> <i>Plagiobothrys stipitatus</i> var. <i>micranthus</i>	stipitate popcorn-flower
<i>Brassicaceae - Mustard Family</i> <i>Brassica nigra</i> * <i>Brassica rapa</i> * <i>Cakile maritima</i> * <i>Cardamine oligosperma</i> <i>Hirschfeldia incana</i> * <i>Lepidium latifolium</i> * <i>Lepidium nitidum</i> var. <i>nitidum</i> <i>Raphanus sativus</i> * <i>Rorippa nasturtium-aquaticum</i> * <i>Sisymbrium officinale</i> *	black mustard field mustard sea-rocket bitter cress hoary mustard broad-leaf peppergrass peppergrass wild radish water cress hedge mustard
<i>Callitrichaceae - Water - starwort Family</i> <i>Callitriche marginata</i>	California water-starwort
<i>Caprifoliaceae - Honeysuckle Family</i> <i>Lonicera hispidula</i> var. <i>vacillans</i> <i>Lonicera japonica</i> *?+ <i>Sambucus mexicana</i> <i>Symphoricarpos albus</i> var. <i>laevigatus</i>	California honeysuckle Japanese honeysuckle blue elderberry snowberry
<i>Caryophyllaceae - Pink Family</i> <i>Cerastium glomeratum</i> * <i>Polycarpon tetraphyllum</i> * <i>Silene gallica</i> * <i>Spergularia macrotheca</i> var. <i>macrotheca</i> ? <i>Spergularia rubra</i> * <i>Spergularia villosa</i> * <i>Stellaria media</i> *	mouse-ear chickweed four-leaved allseed common catchfly large flowered sand-spurry ruby sand-spurry villous sand-spurry common chickweed
<i>Casuarinaceae - She-oak Family</i> <i>Casuarina equisetifolia</i> *	horsetail casuarina
<i>Celastraceae - Staff-tree Family</i> <i>Euonymus japonica</i> *	euonymus
<i>Ceratophyllaceae - Hornwort Family</i> <i>Ceratophyllum demersum</i>	hornwort

**TABLE E.3-4**  
**PLANT SPECIES DETECTED AT NFD POINT MOLATE**  
(Continued)

<b>CLASS</b> <b>Family</b> <b>Scientific Name</b>	<b>Common Name</b>
Chenopodiaceae – Goosefoot Family <i>Atriplex triangularis</i> * <i>Salicornia virginica</i> <i>Salsola soda</i>	spearscale pickleweed Russian thistle
Convolvulaceae – Morning-glory Family <i>Calystegia purpurata</i> ssp. <i>purpurata</i> <i>Calystegia subacaulis</i> <i>Convolvulus arvensis</i> * <i>Dichondra donelliana</i> <sup>2</sup>	morning-glory hill morning-glory field bindweed dichondra
Crassulaceae – Stone-crop Family <i>Crassula argentea</i> * <i>Crassula connata</i> <i>Dudleya farinosa</i> <sup>2</sup>	jade plant pigmy-weed bluff lettuce
Cucurbitaceae – Gourd Family <i>Marah fabaceus</i>	California man-root
Cuscutaceae – Dodder Family <i>Cuscuta salina</i> var. <i>major</i>	salty sodder
Dipsacaceae – Teasel Family <i>Dipsacus sativus</i> *	Fuller's teasel
Euphorbiaceae – Spurge Family <i>Chamaesyce maculata</i> * <i>Chamaesyce serpyllifolia</i> ssp. <i>serpyllifolia</i> <i>Eremocarpus setigerus</i> <i>Euphorbia crenulata</i> + <i>Euphorbia peplus</i> *	spotted spurge thyme-leaved spurge doveweed spurge petty spurge
Fabaceae – Pea family <i>Acacia dealbata</i> * <i>Acacia melanoxylon</i> * <i>Astragalus gambelianus</i> <i>Chamaesyce maculata</i> * <i>Cytisus scoparius</i> * <i>Erythrina crista-galli</i> * <i>Genista monspessulana</i> * <i>Lathyrus latifolius</i> * <i>Lathyrus vestitus</i> var. <i>vestitus</i> <i>Lotus corniculatus</i> * <i>Lotus humistratus</i> <i>Lotus micranthus</i> <i>Lotus purshianus</i> var. <i>purshianus</i> <i>Lotus scoparius</i> <i>Lotus wrangelianus</i> <i>Lupinus arboreus</i> <sup>2</sup> <i>Lupinus bicolor</i> <i>Lupinus bicolor</i> var. <i>umbellatus</i> <i>Lupinus formosus</i> var. <i>formosus</i> <i>Lupinus succulentus</i> + <i>Medicago polymorpha</i> * <i>Melilotus albus</i> * <i>Melilotus indica</i> * <i>Robinia pseudo-acacia</i> * <i>Trifolium ciliolatum</i> +	silver wattle blackwood acacia Gambel's dwarf locoweed spotted spurge Scotch broom coral tree French broom perennial sweet pea common Pacific pea bird foot trefoil hill lotus least trefoil Spanish clover California broom Chile trefoil yellow bush lupine dove lupine dove lupine summer lupine succulent annual lupine bur-clover white sweet-clover yellow sweet-clover black locust tree clover

**TABLE E.3-4**  
**PLANT SPECIES DETECTED AT NFD POINT MOLATE**  
(Continued)

CLASS Family	Common Name
<b>Scientific Name</b> <i>Trifolium dubium*</i> <i>Trifolium gracilentum</i> var. <i>gracilentum</i> + <i>Trifolium hirtum*</i> <i>Trifolium microcephalum</i> + <i>Trifolium subterraneum*</i> Fabaceae - Pea family (Continued) <i>Vicia americana</i> var. <i>americana</i> <i>Vicia benghalensis*</i> <i>Vicia sativa</i> ssp. <i>nigra*</i> <i>Vicia sativa</i> ssp. <i>sativa*</i> <i>Vicia villosa</i> ssp. <i>villosa*</i>	little hop clover pin-point clover rose clover small head clover subterranean clover  American vetch vetch common vetch common vetch hairy vetch
Fagaceae - Oak Family <i>Quercus agrifolia</i>	coast live oak
Gentianaceae - Gentian Family <i>Centaurium davyi</i> ? <i>Centaurium muehlenbergii</i> ?	Davy's centaury centaury
Geraniaceae - Geranium Family <i>Erodium botrys*</i> <i>Erodium cicutarium*</i> <i>Erodium moschatum*</i> <i>Geranium dissectum*</i> <i>Geranium molle*</i> <i>Pelargonium peltatum</i>	long-beaked filaree red-stemmed filaree white-stemmed filaree cut-leaved geranium crane's-bill geranium ivy geranium
Grossulariaceae - Gooseberry Family <i>Ribes californicum</i> var. <i>californicum</i> <i>Ribes menziesii</i>	hillside gooseberry canyon gooseberry
Hippocastanaceae - Buckeye Family <i>Aesculus californica</i>	California buckeye
Hydrophyllaceae - Waterleaf Family <i>Phacelia californica</i> <i>Phacelia imbricata</i> ssp. <i>imbricata</i>	phacelia phacelia
Juglandaceae - Walnut Family <i>Juglans regia*</i>	English walnut
Lamiaceae - Mint Family <i>Monardella villosa</i> ssp. <i>villosa</i> <i>Pogogyne serpylloides</i> <i>Stachys ajugoides</i> var. <i>rigida</i>	coyote mint thyme-leaved pogogyne rigid hedge nettle
Lauraceae - Laurel Family <i>Persea americana*</i> <i>Umbrellularia californica</i>	avocado California bay
Lythraceae - Loosestrife Family <i>Lythrum hyssopifolia*</i>	loosestrife
Malvaceae - Mallow Family <i>Malva parviflora*</i> <i>Sidalcea malvaeflora</i> ssp. <i>malvaeflora</i>	cheeseweed checker mallow
Melastomataceae - Melastoma Family <i>Melastoma</i> sp.*	princess flower
Myoporaceae - Myoporum Family <i>Myoporum laetum*</i>	myoporum

**TABLE E.3-4**  
**PLANT SPECIES DETECTED AT NFD POINT MOLATE**  
 (Continued)

<b>CLASS</b>	
<b>Family</b>	
<b>Scientific Name</b>	<b>Common Name</b>
Myrtaceae - Myrtle Family	
<i>Eucalyptus globulus*</i>	Tasmanian blue gum
<i>Syzygium uniflora*</i>	Surinam-cherry
Oleaceae - Olive Family	
<i>Olea europea*</i>	olive
Onagraceae - Evening Primrose Family	
<i>Camissonia ovata</i>	sun cups
<i>Epilobium brachycarpum</i>	fireweed
<i>Epilobium ciliatum ssp. ciliatum</i>	northern willow herb
Oxalidaceae - Oxalis Family	
<i>Oxalis pes-caprae*</i>	Bermuda buttercup
Papaveraceae - Poppy Family	
<i>Eschscholzia californica</i>	California poppy
Pittosporaceae - Pittosporum Family	
<i>Pittosporum crassifolium*</i>	thick-leaved pittosporum
<i>Pittosporum undulatum*</i>	victorian box
Plantaginaceae - Plantain Family	
<i>Plantago coronopus*</i>	cut-leaved plantain
<i>Plantago erecta</i>	plantain
<i>Plantago lanceolata*</i>	English plantain
<i>Plantago major*</i>	broadleaf plantain
Platanaceae - Sycamore Family	
<i>Plantanus acerifolia*</i>	London plane tree
Plumbaginaceae - Thrift Family	
<i>Limonium californicum</i>	sea lavender
<i>Limonium sinuatum*</i>	statice
Polemoniaceae - Phlox Family	
<i>Gilia sp.+</i>	gilia
<i>Navarretia squarrosa</i>	skunkweed
Polygonaceae - Buckwheat Family	
<i>Eriogonum nudum var. auriculatum<sup>2</sup></i>	coast buckwheat
<i>Polygonum arenastrum*</i>	common knotweed
<i>Rumex acetosella*</i>	sheep sorrel
<i>Rumex conglomeratus*</i>	whorled dock
<i>Rumex crispus*</i>	curly dock
<i>Rumex maritimus</i>	golden dock
<i>Rumex obtusifolius*+</i>	bitter dock
<i>Rumex pulcher*</i>	fiddle dock
<i>Rumex salicifolius ssp. crassus<sup>2+</sup></i>	willow dock
Portulacaceae - Purslane Family	
<i>Claytonia parviflora ssp. parviflora+</i>	miner's lettuce
<i>Claytonia perfoliata ssp. perfoliata</i>	miner's lettuce
Primulaceae - Primrose Family	
<i>Anagallis arvensis*</i>	scarlet pimpernel
<i>Centunculus minimus<sup>2</sup></i>	chaffweed
Rhamnaceae - Buckthorn Family	
<i>Rhamnus californica ssp. californica</i>	California coffeeberry
Rosaceae - Rose Family	
<i>Acaena pinnatifida var. californica</i>	California acaena
<i>Aphanes occidentalis</i>	western lady's mantle
<i>Cotoneaster pannosa*</i>	cotoneaster

**TABLE E.3-4**  
**PLANT SPECIES DETECTED AT NFD POINT MOLATE**  
 (Continued)

<b>CLASS</b>	
<b>Family</b>	<b>Common Name</b>
<b>Scientific Name</b>	
<i>Heteromeles arbutifolia</i>	toyon
<i>Oemleria cerasiformis</i>	oso berry
<i>Potentilla glandulosa</i> ssp. <i>glandulosa</i>	cinquefoil
<i>Pyracantha angustifolia</i> *	common firethorn
<i>Pyrus communis</i> *	pear
<b>Rosaceae - Rose Family (Continued)</b>	
<i>Rosa californica</i>	California rose
<i>Rosa odorata</i> *	tea rose
<i>Rubus discolor</i> *	Himalayan blackberry
<i>Rubus ulmifolius</i> var. <i>inermis</i> *	evergreen thornless blackberry
<i>Rubus ursinus</i>	California blackberry
<b>Rubiaceae - Madder Family</b>	
<i>Galium aparine</i>	bedstraw
<i>Galium porrigens</i> var. <i>porrigens</i>	climbing bedstraw
<b>Salicaceae - Willow Family</b>	
<i>Salix laevigata</i>	red willow
<i>Salix lasiolepis</i>	arroyo willow
<b>Saxifragaceae - Saxifrage Family</b>	
<i>Escallonia rubra</i> *	escallonia
<b>Scrophulariaceae - Figwort Family</b>	
<i>Antirrhinum majus</i> *	snap dragon
<i>Bellardia trixago</i> *	bellardia
<i>Castilleja densiflora</i> ssp. <i>densiflora</i>	owl's-clover
<i>Castilleja foliolosa</i>	woolly Indian paintbrush
<i>Linaria canadensis</i>	blue toad flax
<i>Mimulus aurantiacus</i>	bush monkey-flower
<i>Mimulus guttatus</i>	common large monkey-flower
<i>Scrophularia californica</i> ssp. <i>californica</i>	California figwort, bee plant
<i>Verbascum thapsus</i> *	woolly mullein
<i>Veronica</i> sp.	
<b>Solanaceae - Nightshade Family</b>	
<i>Nicotiana glauca</i> *	tree tobacco
<i>Solanum americanum</i>	white nightshade
<i>Solanum furcatum</i> *	forked nightshade
<b>Tropaeolaceae - Nasturtium Family</b>	
<i>Tropaeolum majus</i> *	garden nasturtium
<b>Ulmaceae - Elm Family</b>	
<i>Ulmus pumila</i> *	Siberian elm
<b>Urticaceae - Nettle Family</b>	
<i>Soleirolia soleirolia</i> *	baby's tears
<b>Valerianaceae - Valerian Family</b>	
<i>Centranthus ruber</i> *	red valerian
<b>Verbenaceae - Vervain Family</b>	
<i>Phyla nodiflora</i> var. <i>nodiflora</i>	lippia
<b>MONOCOTYLEDONAE</b>	
<b>Araceae - Arum Family</b>	
<i>Zantedeschia aethiopica</i> *	calla lily
<b>Arecaceae - Palm Family</b>	
<i>Phoenix canariensis</i> *	Canary Island palm
<b>Cyperaceae - Sedge Family</b>	
<i>Carex barbarae</i>	Barbara's sedge

**TABLE E.3-4**  
**PLANT SPECIES DETECTED AT NFD POINT MOLATE**  
(Continued)

<b>CLASS</b> <b>Family</b>	<b>Scientific Name</b>	<b>Common Name</b>
	<i>Carex praegracilis</i> <sup>2</sup> <i>Carex tumulicola</i> <sup>2</sup> <i>Cyperus eragrostis</i> <i>Eleocharis macrostachya</i> <i>Scirpus californicus</i> Cyperaceae - Sedge Family (Continued)	deer-bed sedge foothill sedge umbrella sedge creeping spike-rush California bulrush
	<i>Scirpus cernuus</i> <i>Scirpus maritimus</i>	low bulrush saltmarsh bulrush
Iridaceae - Iris Family	<i>Chasmanthe floribunda</i> * <i>Iris x hybrid</i> * <i>Sisyrinchium bellum</i>	chasmanthe bearded iris California blue-eyed grass
Juncaceae - Rush Family	<i>Juncus balticas</i> <i>Juncus bufonius</i> var. <i>bufonius</i> <i>Juncus bufonius</i> var. <i>congestus</i> <sup>2</sup> <i>Juncus effusus</i> var. <i>pacificus</i> <i>Juncus occidentalis</i> <sup>2</sup> <i>Juncus patens</i> <i>Juncus phaeocephalus</i> var. <i>paniculatus</i> <i>Juncus tenuis</i> <i>Juncus xiphioides</i> <i>Luzula comosa</i>	wire rush toad rush congested toad rush common rush slender rush spreading rush brown-headed rush rush iris-leaf rush wood rush
Liliaceae - Lily Family	<i>Agapanthus africanus</i> * <i>Agave americana</i> * <i>Allium cepa</i> * <i>Brodiaea elegans</i> ssp. <i>elegans</i> <i>Chlorogalum pomeridianum</i> var. <i>pomeridianum</i> <i>Dichelostemma capitatum</i> ssp. <i>capitatum</i> <i>Dichelostemma multiflorum</i> <sup>3</sup> <i>Triteleia hyacinthina</i> <sup>2</sup> <i>Triteleia laxa</i>	lily-of-the-Nile century plant yellow onion harvest brodiaea wavy-leaf soap plant blue dicks wild hyacinth white brodiaea lithurriel's spear
Orchidaceae - Orchid Family	<i>Piperia elegans</i> <i>Piperia transversa</i> <sup>2</sup>	elegant rein-orchid rein-orchid
Poaceae - Grass Family	<i>Agrostis pallens</i> <i>Agrostis viridis</i> * <i>Aira caryophyllea</i> * <i>Arundo donax</i> * <i>Avena barbata</i> * <i>Avena fatua</i> * <i>Brachypodium distachyon</i> * <i>Briza maxima</i> * <i>Briza minor</i> * <i>Bromus carinatus</i> var. <i>carinatus</i> <i>Bromus diandrus</i> <i>Bromus hordeaceus</i> * <i>Bromus madritensis</i> ssp. <i>madritensis</i> * <i>Bromus madritensis</i> ssp. <i>rubens</i> * <i>Cortaderia jubata</i> *	leafy bentgrass water bent grass silver European hairgrass giant reed slender wild oat wild oat purple falsebrome big quaking grass little quaking grass California brome ripgut brome soft chess red brome red brome pampas grass

**TABLE E.3-4**  
**PLANT SPECIES DETECTED AT NFD POINT MOLATE**  
 (Continued)

CLASS Family	Common Name
<b>Scientific Name</b> <i>Cynodon dactylon</i> * <i>Dactylis glomerata</i> * <i>Danthonia californica</i> var. <i>californica</i> <i>Deschampsia elongata</i> <i>Distichlis spicata</i>	Bermuda grass orchard grass California oatgrass slender hairgrass saltgrass
<i>Poaceae</i> - Grass Family (Continued) <i>Elymus glaucus</i> ssp. <i>glaucus</i> <i>Elymus glaucus</i> ssp. <i>jepsonii</i> <sup>3</sup> <i>Elymus elymoides</i> <i>Elymus multisetus</i> <i>Festuca arundinacea</i> * <i>Festuca californica</i> <i>Festuca idahoensis</i> <i>Festuca rubra</i> <sup>2</sup> <i>Gastridium ventricosum</i> * <i>Holcus lanatus</i> * <i>Hordeum brachyantherum</i> ssp. <i>brachyantherum</i> <i>Hordeum marinum</i> ssp. <i>gussoneanum</i> * <i>Hordeum murinum</i> ssp. <i>leporinum</i> * <i>Koeleria macrantha</i> <i>Leymus triticoides</i> <i>Leymus x vancouverensis</i> <sup>3</sup> <i>Lolium multiflorum</i> * <i>Lolium perenne</i> * <i>Melica californica</i> <i>Melica torreyana</i> <i>Nassella lepida</i> <i>Nassella pulchra</i> <i>Parapholis incurva</i> * <i>Paspalum dilatatum</i> * <i>Phalaris aquatica</i> * <i>Phalaris paradoxa</i> * <i>Piptatherum miliaceum</i> * <i>Poa annua</i> * <i>Poa secunda</i> ssp. <i>secunda</i> <i>Polypogon interruptus</i> * <i>Polypogon monspeliensis</i> * <i>Spartina foliosa</i> <i>Vulpia bromoides</i> * <i>Vulpia microstachys</i> <i>Vulpia myuros</i> var. <i>myuros</i> *	blue wildrye blue wildrye squirreltail big squirreltail tall fescue California fescue Idaho fescue red fescue nit grass velvet grass meadow barley Mediterranean barley hare barley junegrass creeping ryegrass Vancouver's ryegrass Italian ryegrass perennial ryegrass California melic grass Torrey melic foothill needlegrass purple needlegrass sickle grass Dallis grass Harding grass paradox canary grass smilo grass annual bluegrass one-sided bluegrass ditch beard grass rabbitfoot grass California cordgrass six-weeks fescue few-flowered fescue zorro grass
<i>Typhaceae</i> - Cattail Family <i>Typha angustifolia</i> <i>Typha latifolia</i>	narrow-leaved cattail broadleaf cattail

Source: U.S. Navy 1998f.

- Nonnative species or species not naturally occurring on site.
- + Species identified on site by Lake (1996) , but not observed during the 1998 surveys.
- ? Uncertain identification due to condition of plant material.
- <sup>1</sup> Sensitive taxon.
- <sup>2</sup> Unusual or significant taxon in Contra Costa County (Lake, 1995).
- <sup>3</sup> Taxon not previously recorded from the East Bay

*This page intentionally left blank.*



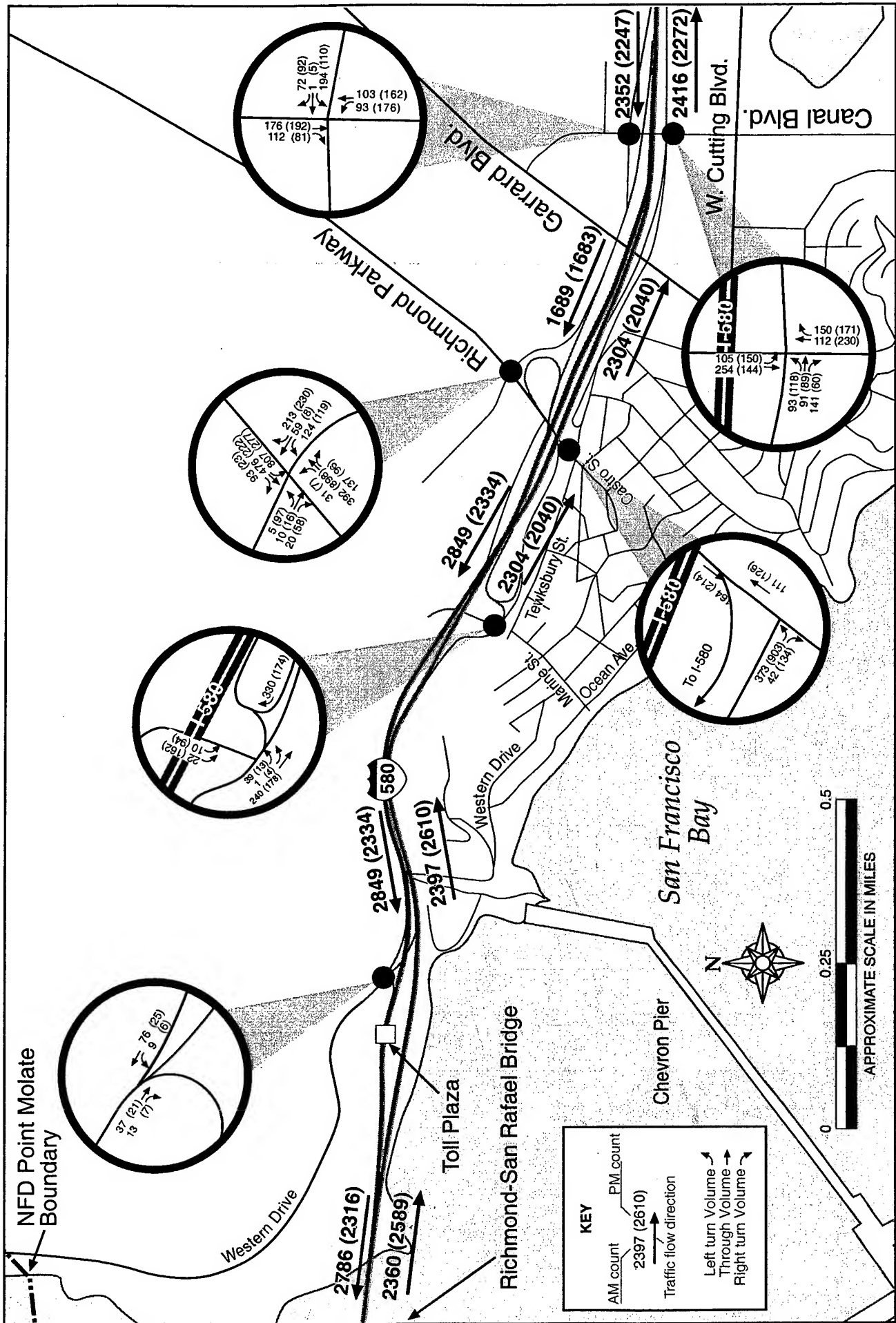


Figure E.4-1: Existing Traffic Volumes (AM/PM)

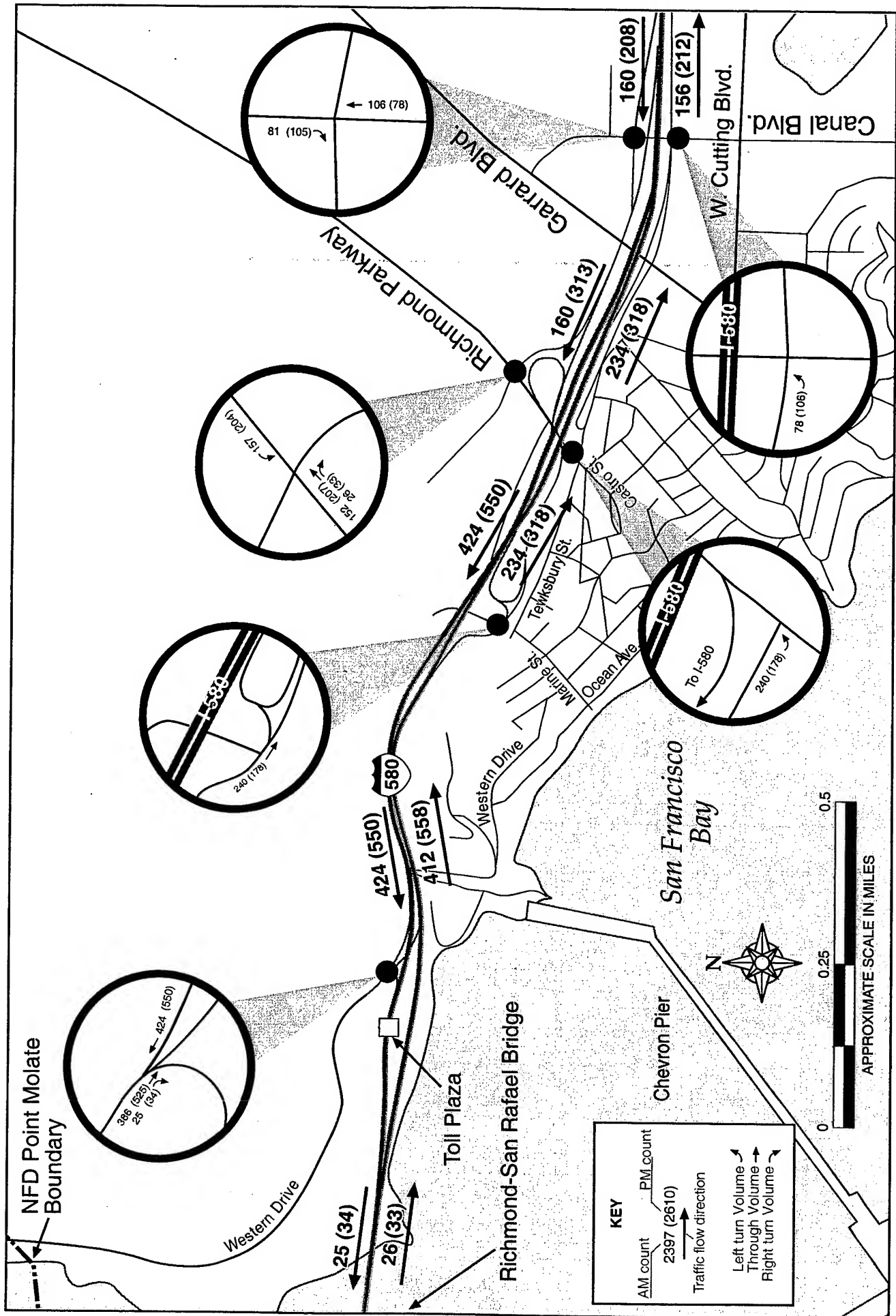
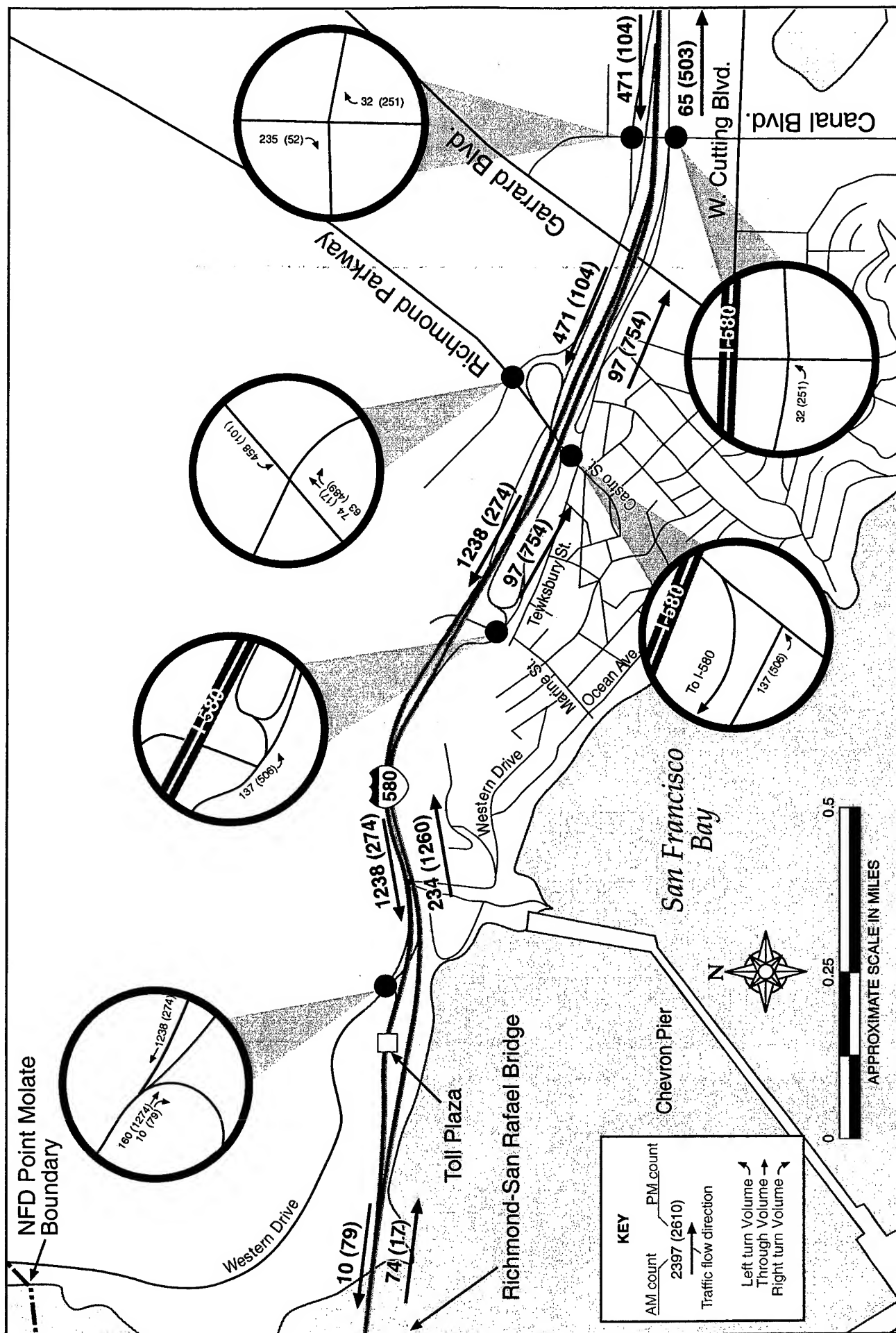


Figure E.4-2: Alternative 1 Project Trips



**Figure E.4-3: Alternative 2 Project Trips**

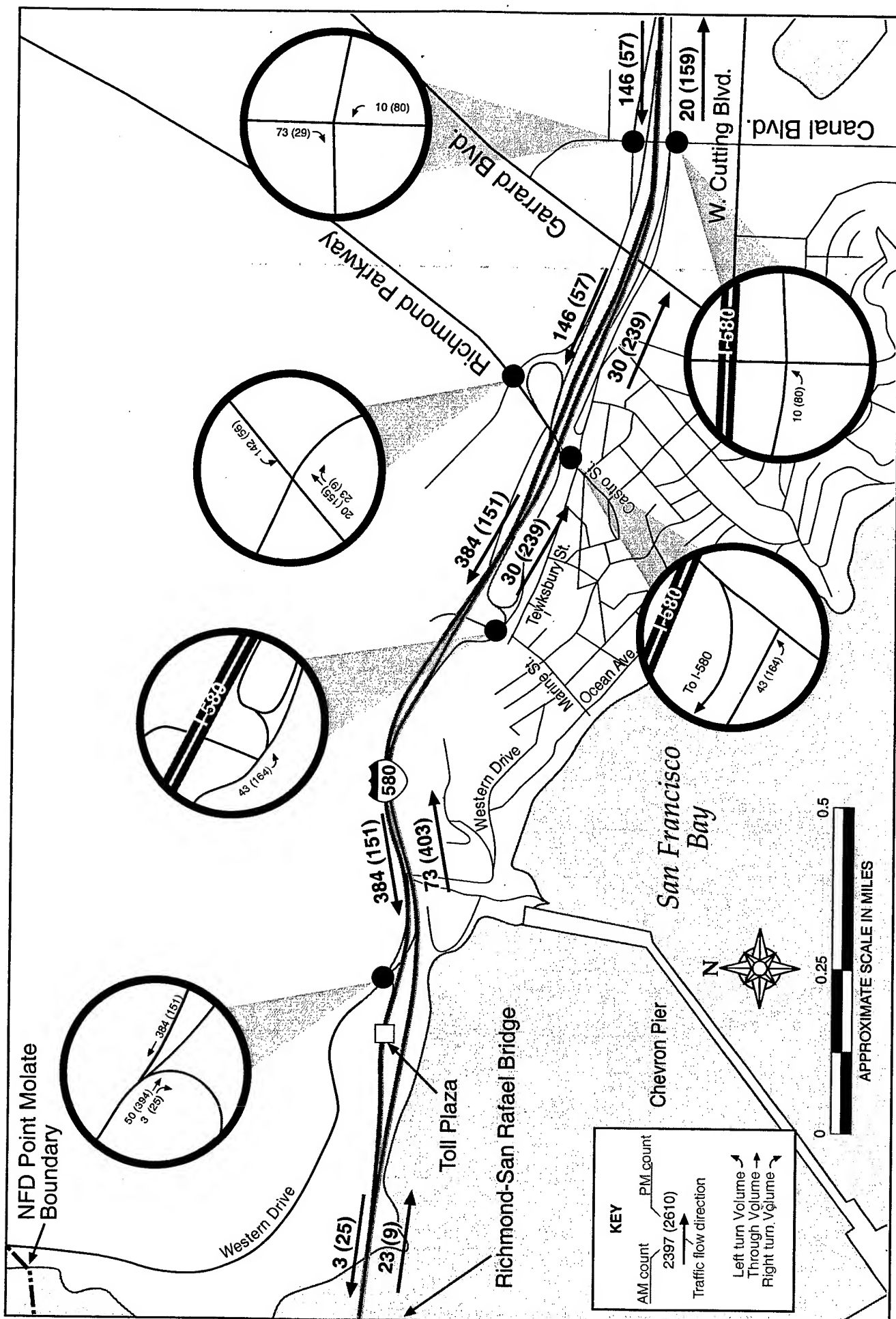
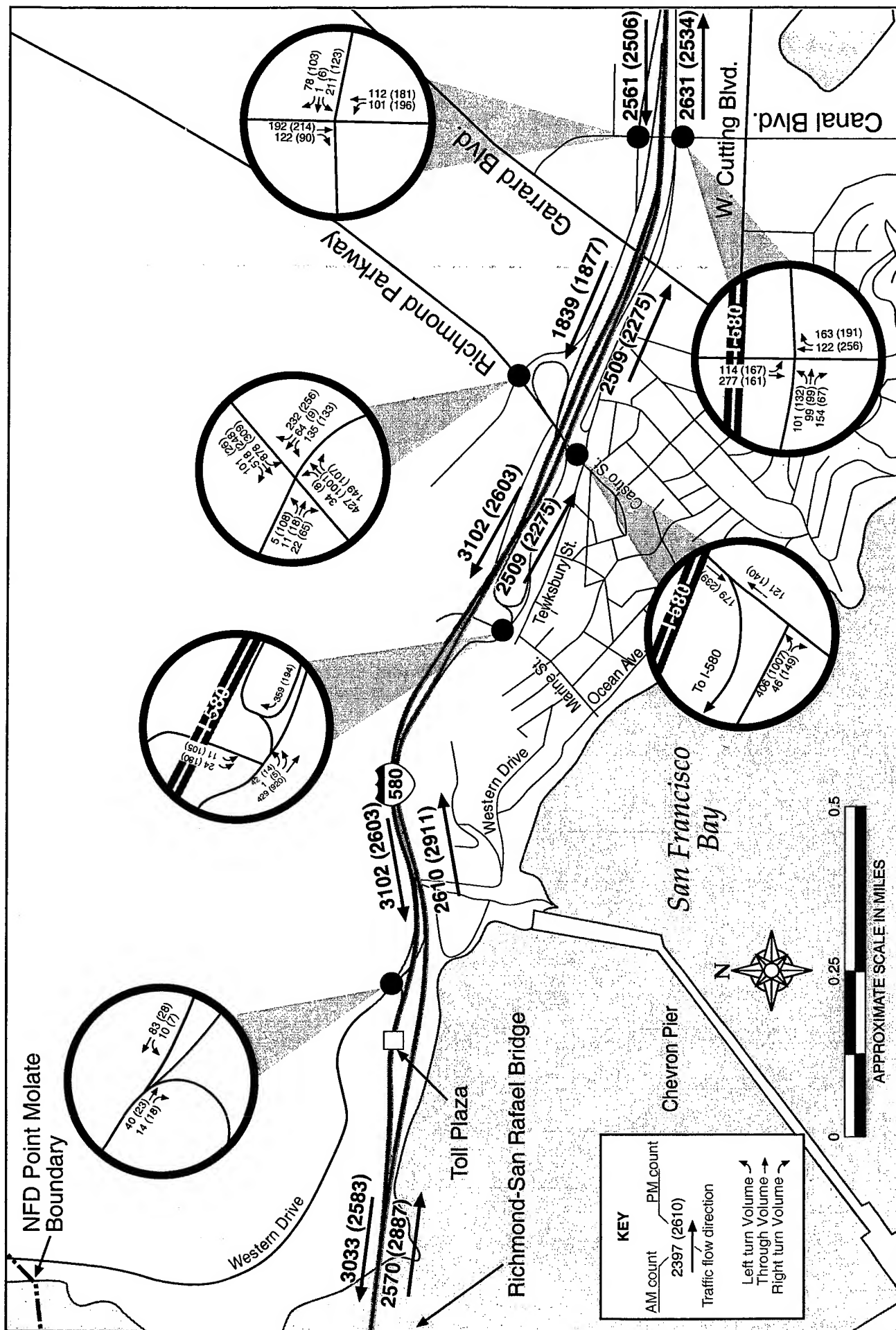


Figure E.4-4: Alternative 3 Project Trips



**Figure E.4-5: Year 2010 No Action Alternative Traffic Volumes**

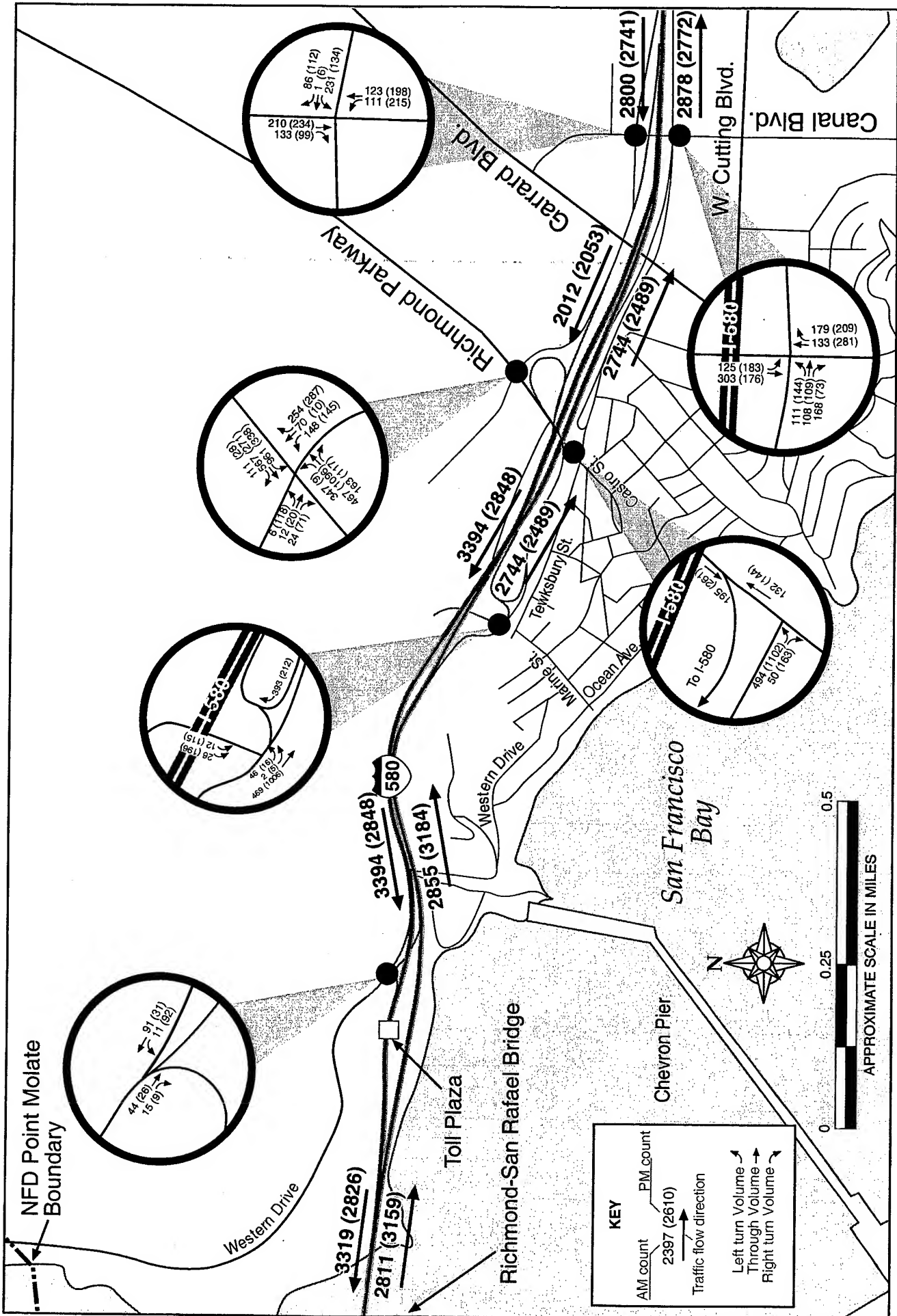


Figure E.4-6: Year 2020 No Action Alternative Traffic Volumes



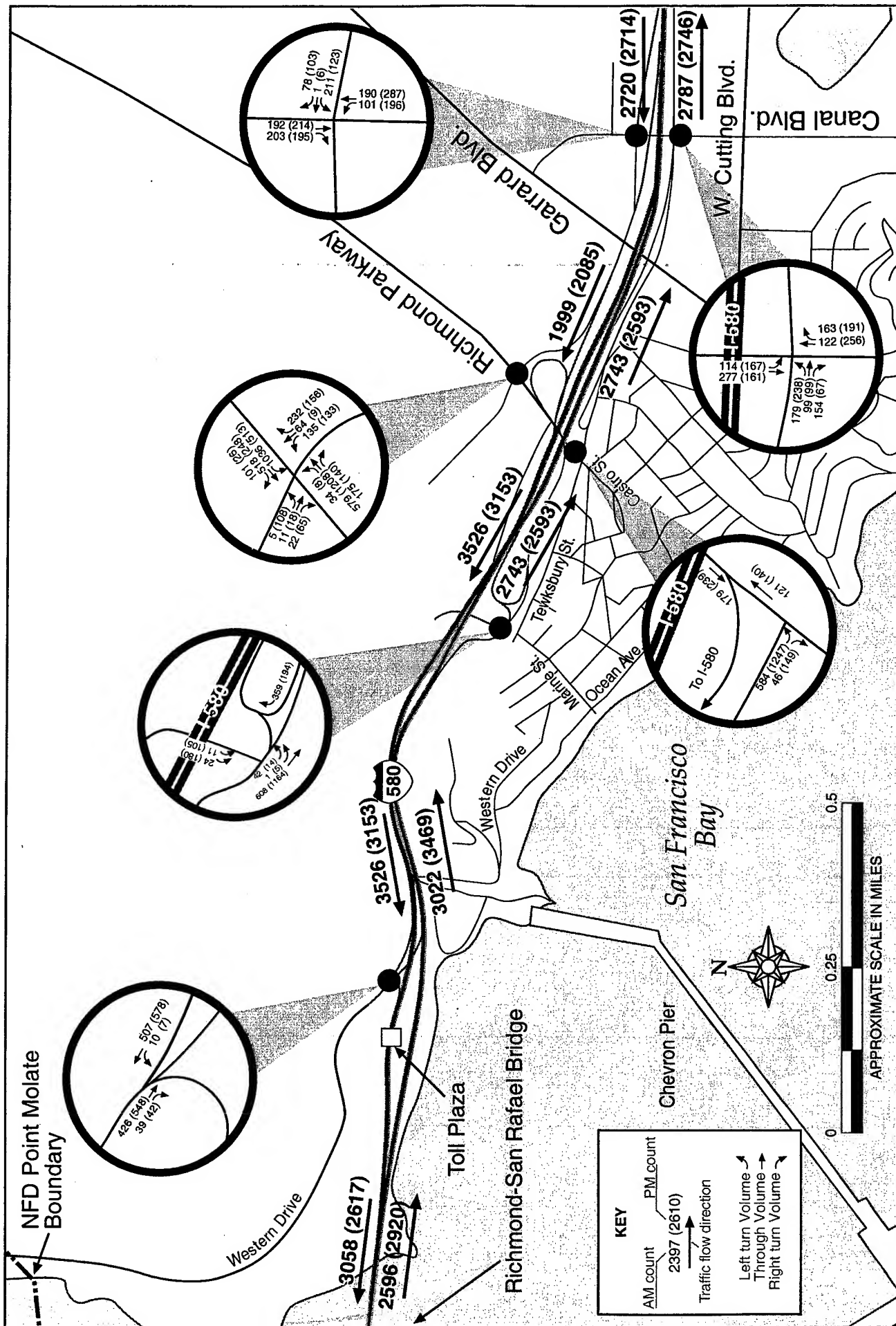


Figure E.4-7: Year 2010 Plus Alternative 1 Traffic Volumes

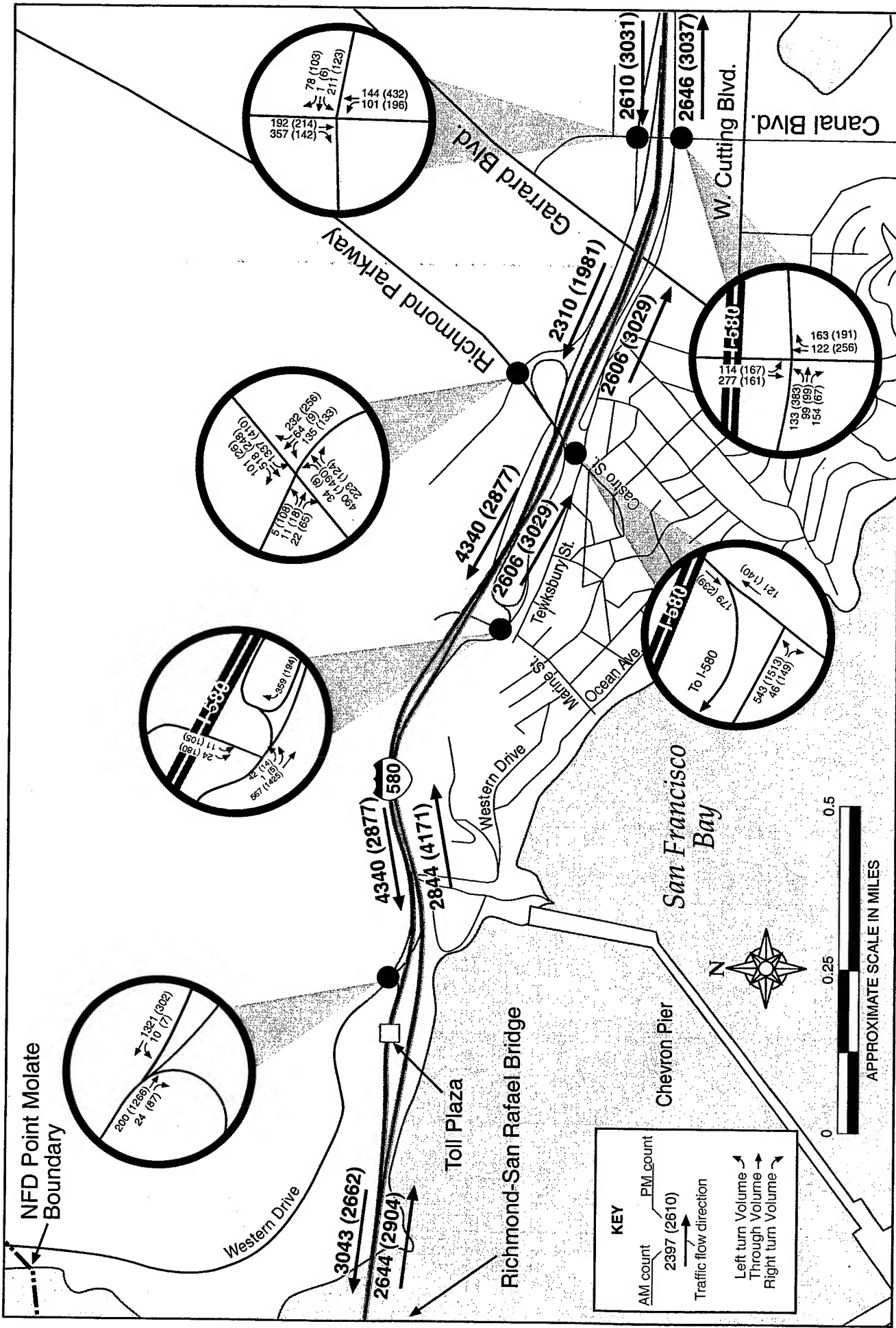
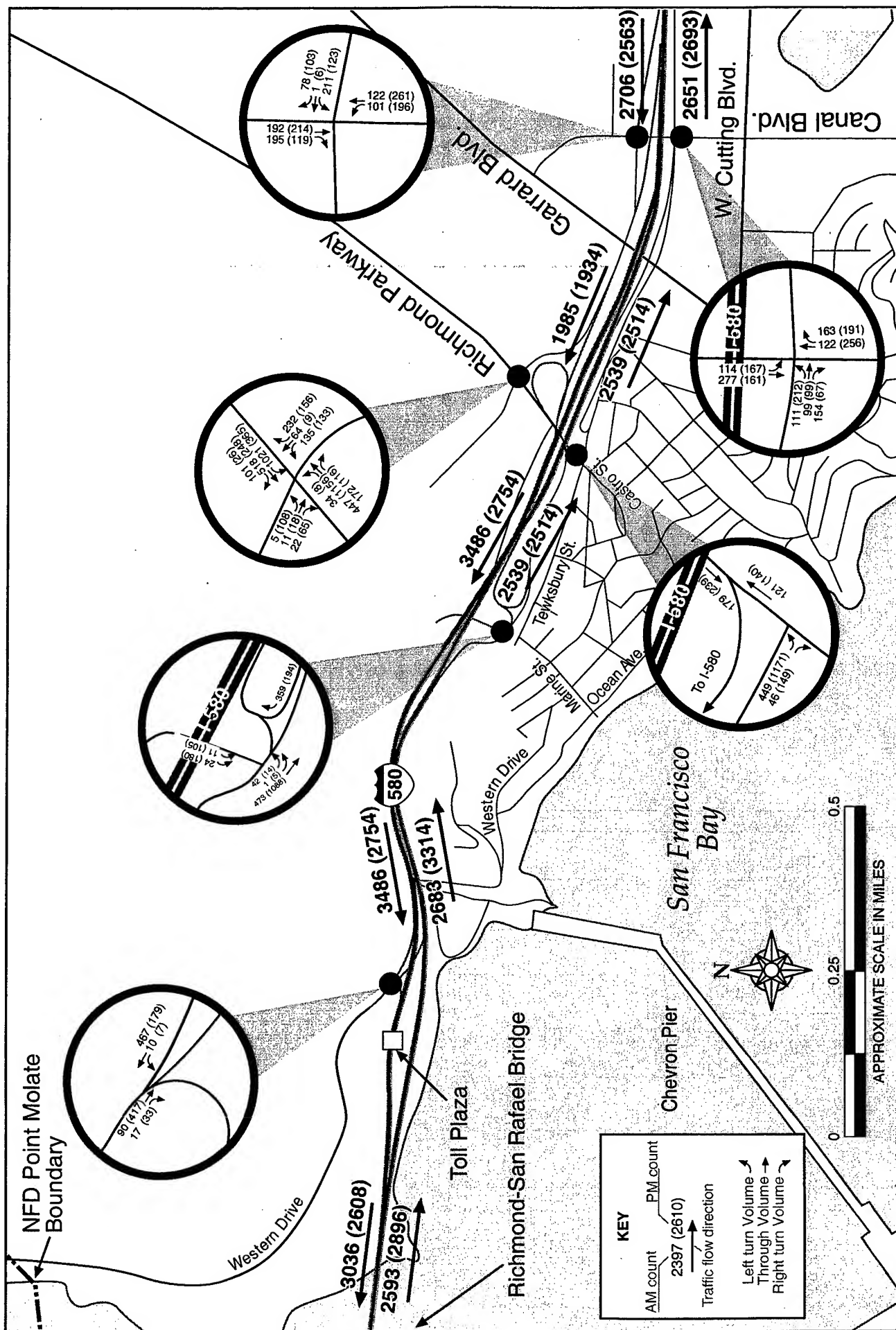


Figure E.4-8: Year 2010 Plus Alternative 2 Traffic Volumes





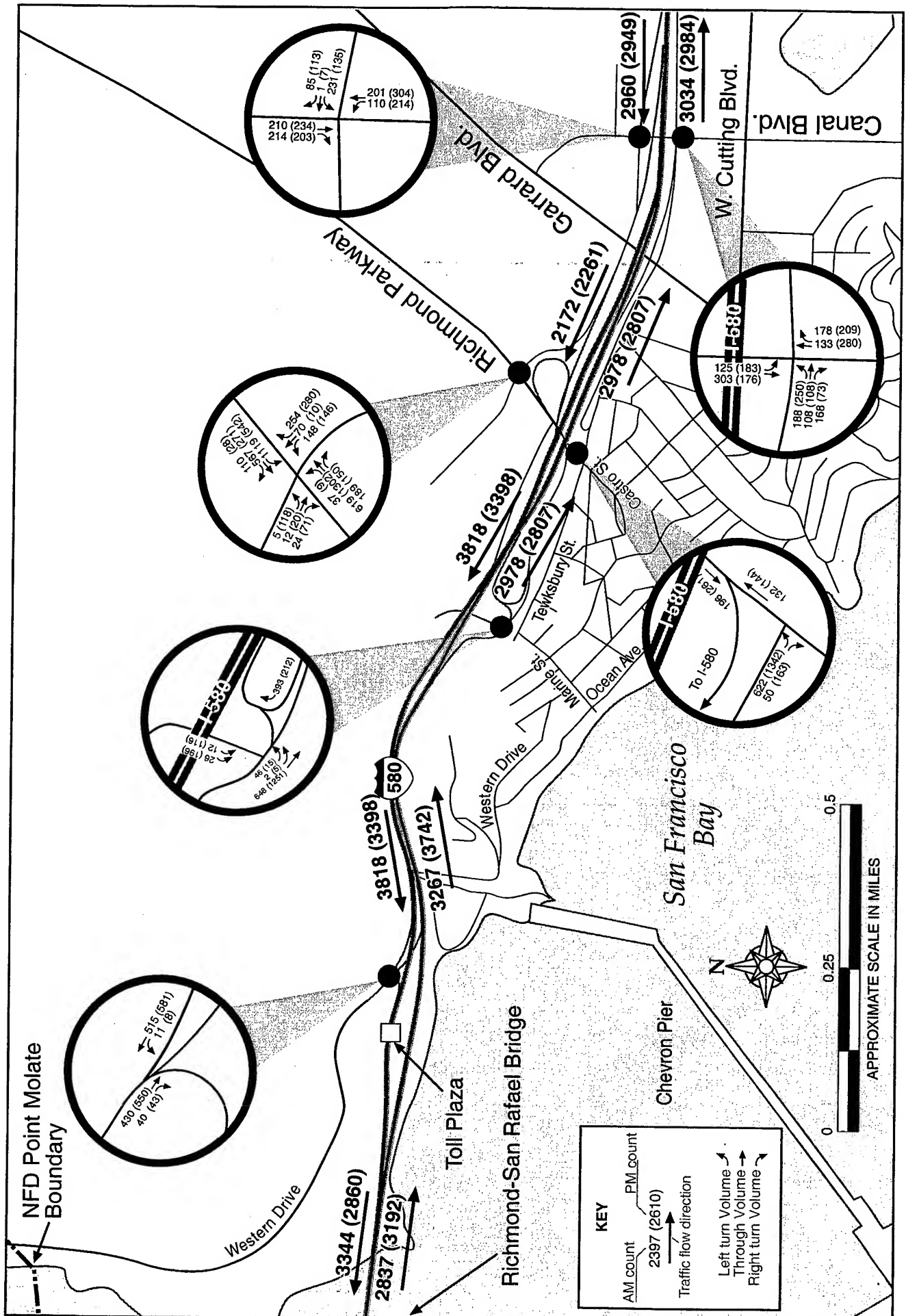
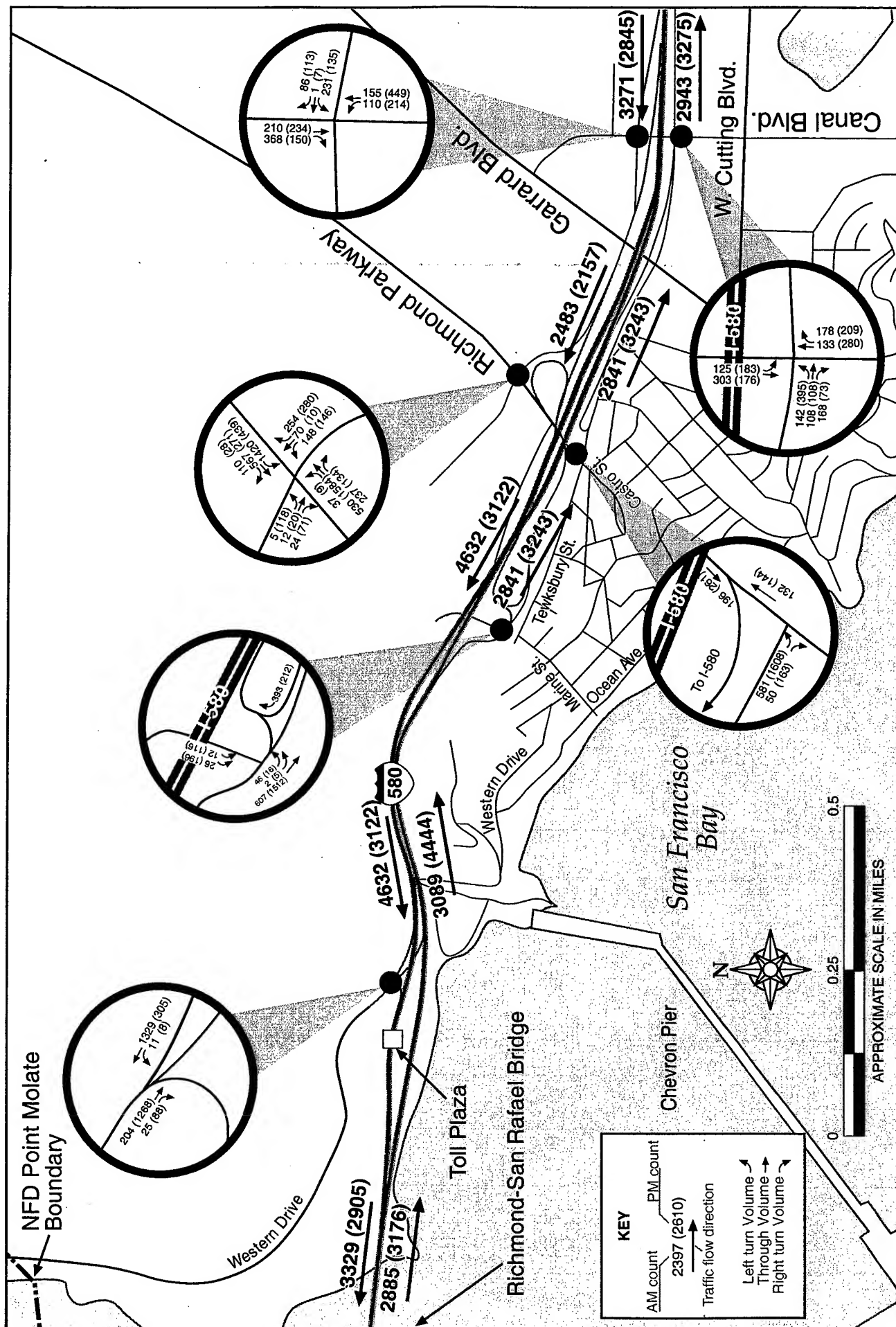


Figure E.4-10: Year 2020 Plus Alternative 1 Traffic Volumes (at Full Build-out)



**Figure E.4-11: Year 2020 Plus Alternative 2 Traffic Volumes (at Full Build-out)**

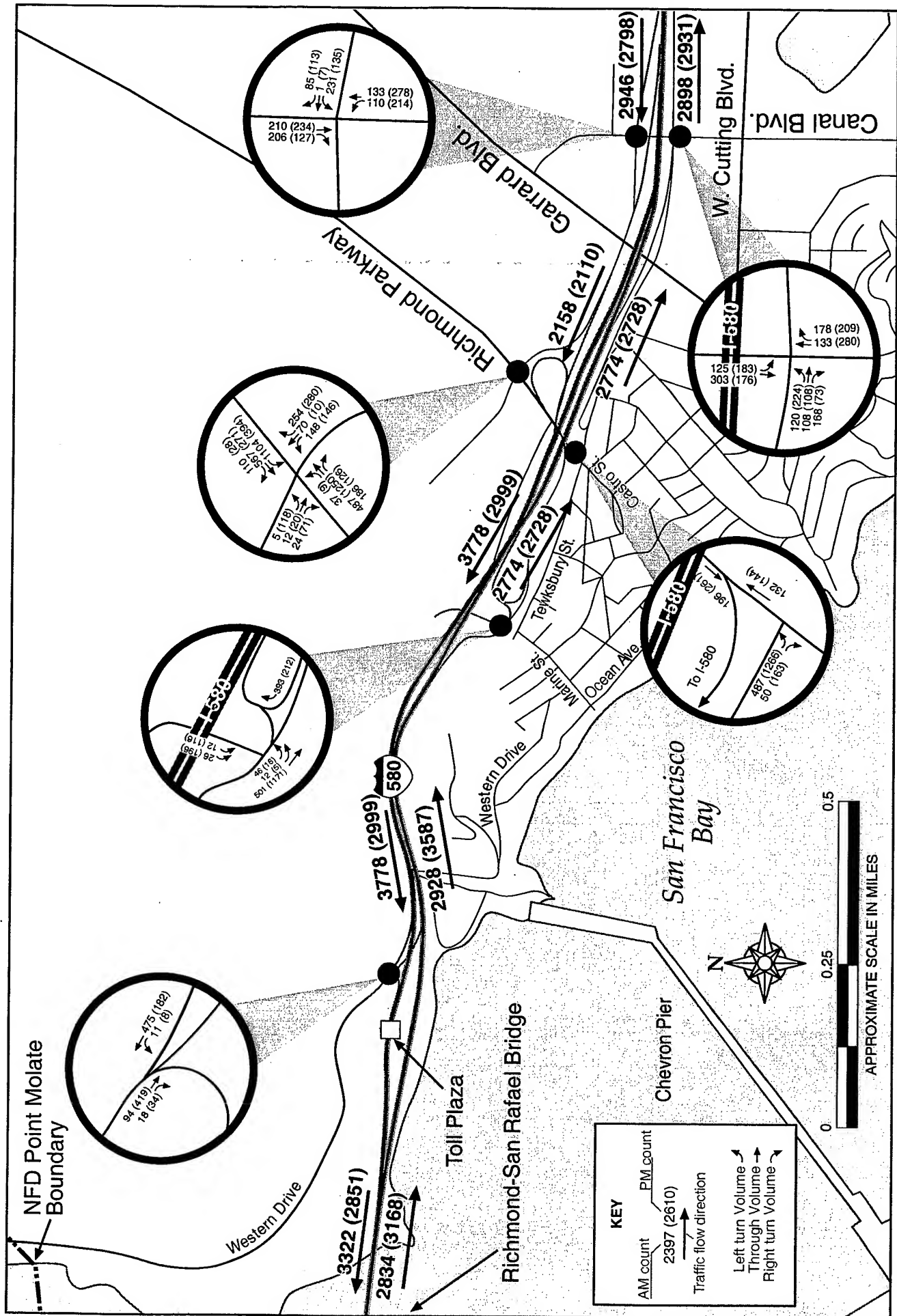
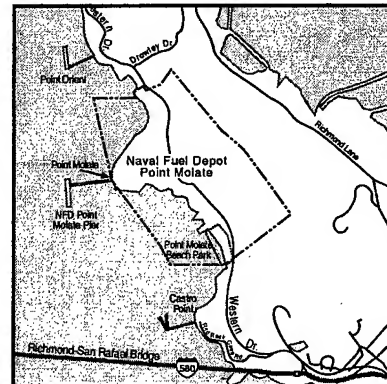


Figure E.4-12: Year 2020 Plus Alternative 3 Traffic Volumes (at Full Build-out)

## E.5 Air Quality



## E.5 AIR QUALITY

---

### E.5.1 ESTIMATION OF TRAFFIC-RELATED CRITERIA AIR POLLUTANTS

Traffic-related emissions of criteria air pollutants were estimated for the three community reuse alternatives using the URBEMIS5 modeling program. Input values for meteorological conditions, vehicle fleet characteristics, and trip characteristics were selected using the *BAAQMD CEQA Guidelines* (BAAQMD 1999b).

**Analysis Year:** 2010 was selected as the analysis year, because the emission factors for 2010 are considered to be more reliable than the values predicted for 2020. Based on trends in emission factors, use of 2010 values is considered to be conservative. The number of trips per day was based on full build-out.

**Season Selection:** Following the *BAAQMD CEQA Guidelines*, summer was used to model all pollutants other than carbon monoxide (CO). CO was modeled using winter meteorology.

**Vehicle and Fuel Type:** Following the *BAAQMD CEQA Guidelines*, the default values for the Bay Area that are incorporated in the URBEMIS5 model were used.

**Average Trip Length:** The *BAAQMD CEQA Guidelines* specify an average trip length of 7.8 miles for Alameda and Contra Costa Counties in the years 2005 and 2010. No average trip length is provided for 2020. For the purpose pollutant modeling, it was assumed that the average trip length would also be 7.8 miles in 2020.

**Temperature Selection:** The *BAAQMD CEQA Guidelines* specify using the mean summer maximum temperature for all pollutants other than CO, and using the mean winter minimum temperature for CO. Appendix D of the *BAAQMD CEQA Guidelines* provides suggested summer and winter temperatures for modeling in the Bay Area. The mean maximum summer temperature for the City of Richmond is in the mid 70's and the mean winter minimum temperature for the City of Richmond is in the low to mid 40s. Therefore, summer conditions were modeled as 75°F and winter conditions were modeled as 40°F.

**Speed Selection:** *BAAQMD CEQA Guidelines* specify an average trip speed of 30 mph for all Bay Area counties other than San Francisco.

**Percent Hot/Cold Start:** *BAAQMD CEQA Guidelines* specify using 60 percent cold starts for modeling in the Bay Area.

**Percent Trip:** *BAAQMD CEQA Guidelines* recommend using the default values for the San Francisco Bay Area that are incorporated in the URBEMIS5 program.

URBEMIS5 estimates pollutant generation rates for total organic gasses (TOG), nitrous oxides (NO<sub>x</sub>), CO, and inhalable particulate matter (PM<sub>10</sub>) from tail pipe exhaust and tire wear. Manual calculations are required to convert TOG emissions into reactive organic gasses (ROG) and to add the re-entrained road dust component to the PM<sub>10</sub> generation rate. ROG generation rates are calculated using the equation:  $ROG = TOG \times 0.92$ .

Re-entrained road dust generation is calculated as 0.69 grams per mile. The rate in pounds is calculated as follows:  $(1 \text{ pound}/453.6 \text{ grams}) \times (0.69 \text{ grams}/\text{mile}) = 0.00152 \text{ pounds per mile}$ .

In addition to the parameters listed above, URBEMIS5 inputs include projected land uses and trip generation rates associated with the land uses. Trip generation rates for various land uses were obtained from the Institute of Transportation Engineers (ITE) Trip Generation Manual (ITE 1997).

Modeled land uses were selected to be in conformance with the Draft *Point Molate Reuse Plan* (Draft Reuse Plan) (City of Richmond 1997a). Following the Draft Reuse Plan, the reuse alternatives used in estimating potential traffic-related impacts assume that most of the reuse activities will take place in existing structures at Point Molate. New construction is assumed to be limited to the following reuse scenarios:

- In Alternative 1 (Residential/Commercial), new residential housing would be constructed in the Northern, Central, and Southern Development Areas. The Draft Reuse Plan calls for the renovation of Building 6 as Live/Work units (these units were modeled as Single-Family Residences).
- In Alternative 2 (Industrial/Commercial), new construction is assumed for Light Industry in the Southern Development Area.

Land uses in the reuse alternatives are grouped into four categories: Commercial; Industrial; Residential, and Open Space/Recreation. Modeling is based on the following units of measure for land area:

- Gross floor area (GFA), measured in 1,000 square feet (KSF) for Commercial and Industrial land uses.
- Housing units for Residential land uses.
- Acres for Open Space/Recreation land uses.

#### *Commercial*

Commercial Development is similar in the three reuse alternatives, with the exception of Alternative 3 (Recreation/ Commercial), which does not include the use of the Administration Building (123) for Job Training. (Note Building 123 only represents 8.6% of the floor area available in the Commercial Category). The following ITE Land Use categories were used to model commercial development:

Winehaven Building (1):	2 of 3 floors (132,590 square feet)
102,590 square feet:	ITE Land Use 770, Business Park
(museum, meeting rooms, performing arts, recording studio)	
15,000 square feet	ITE Land Use 814, Specialty Retail Center
(wine shop, retail)	ITE Land Use 831, Quality Restaurant
15,000 square feet	
(restaurant)	
<hr/>	
(Office)	Cottage 32 ITE Land Use 770, Business Park
Cottages 33 - 59	ITE Land Use 770, Business Park
(Retreat Accom. Bed & Breakfast, Classrooms, Labs. Admin.)	
Winemaker's Cottage (60)	ITE Land Use 770, Business Park
(Retreat Center, Job Training.)	
Admin. Building (123)	ITE Land Use 770, Business Park
(Job Training.)	

The Business Park category was selected because it includes a variety of land uses that are consistent with the listed uses in the Draft Reuse Plan (City of Richmond 1997a). Business Parks generate weekday trips at a rate of 12.76 per KSF, which is a conservative estimate for most of the proposed uses. For example, the trip generation for a Bed & Breakfast can be estimated on a per KSF basis as follows. If the cottages are separated out as a Bed & Breakfast, modeled as a 30 unit motel at 80% occupancy (30 x 0.8 x 9.11 trips per day per unit), 219 trips per day are generated, using ITE Land Use 320 (Motel). Since the cottages have a floor area of 28,000 sq. ft, the trip generation rate is (219 trips per day/28,000 square feet) 7.82 trips per day per KSF. This rate is significantly lower than 12.76 per KSF for a Business Park.

The restaurant and wine shop were modeled separately from other commercial uses because these uses have a significantly higher trip generation rate per KSF than a Business Park. The floor area of the restaurant and wine shop are based on the 30,000-square foot conference and catering complex associated



with the Wente Brothers Vineyards in Livermore. The 30,000 square feet includes the conference facilities, a tasting room, a retail outlet, catering services, and a 200-seat restaurant (Section III.A.3.e of the Draft Reuse Plan, City of Richmond 1997a). The total floor area of the Wente Brothers Estate Winery in Livermore is 122,000 square feet, compared to 198,000 square feet of available floor area in the Winehaven Building. Since the complete conference/catering facility at Wente Brothers has a floor area of 30,000 square feet, assuming that 30,000 square feet of the Winehaven Winery would be divided between two high trip generating uses (Specialty Retail (ITE Land Use 814) and Quality Restaurant (ITE Land Use 831)) is anticipated to produce a conservatively high estimate of trip generation associated with reuse of Point Molate.

#### **Industrial**

All three alternatives include reuse of one floor of the Winehaven Building (1), Cottage 31 & Refrigeration Building, and the Steam Generating Plant for light industry. Alternative 1 and Alternative 2 both include the reuse of Building 17 as a warehouse. Alternative 2 also includes Reuse of Building 6 for industry (Building 6 is renovated as live/work space in Alternative 1) and the construction of 763,561 square feet of new industrial facilities. These industrial units were modeled with the following ITE Land Use categories:

Winery (processing)	ITE Land Use 110, Light Industry
Micropropagation	ITE Land Use 110, Light Industry
Used Clothing, Warehousing	ITE Land Use 110, Light Industry
Warehousing	ITE Land Use 110, Light Industry

The other potential ITE Land Uses (130, Industrial Park, with 6.96 trips per KSF and 150, Warehouse, with 4.97 trips per KSF) generate fewer trips than the 9.97 trips per KSF associated with ITE Land Use 110, Light Industry.

#### **Residential**

This category was only used for Alternative 1. Residential units were modeled as follows.

Single Family Residential	ITE Land Use 210, Single Family Residence
Multi Family Residential	ITE Land Use 230, Residential Condominium/ Townhouse
Live/Work	ITE Land Use 210, Single Family Residence

#### **Open Space Recreation**

Open space was modeled with ITE Land Use categories:

Open Space (Hillside)	ITE Land Use 412, County Park
Open Space (Shoreline)	ITE Land Use 412, County Park
Shoreline Park	ITE Land Use 412, County Park
Recreation	ITE Land Use 412, County Park

*The following ITE Land Uses for parklands were considered for potential modeling:*

ITE Category	Weekday Trips per acre	Saturday Trips per acre	Sunday Trips per acre
411, City Park	1.59	--	--
412, County Park	2.28	12.14	4.13
415, Beach Park	29.81	66.47	68.52
417, Regional Park	4.5	5.65	6.44

The City Park category was not used because it was based on a study of only 3 facilities and did not provide trip generation data for the full week. The Beach Park land use was not selected because the shoreline at Point Molate is not amenable to swimming or other recreational activities associated with



beach parks. The County Park category was used for Open/Recreation because the trip generation rate is based on a greater number of studies than the Regional Park trip generation rate.

The following table summarizes the total estimated trip rates for each reuse scenario for weekday, Saturday, and Sunday trip generation rates. Although the Saturday trip rates were slightly higher than the weekday rates for alternatives 1 and 3 (less than 2 percent greater), use of the weekday trip rates is appropriate because the weekday contributions represent a more significant time period and because the much lower Sunday trip rates balance the Saturday trip rates over the course of a complete week.

Estimated Total Daily Vehicle Trips for Reuse of Point Molate			
Reuse Alternative	Weekday	Saturday	Sunday
1	11,069	11,262	7,977
2	12,884	6,452	3,237
3	5,644	5,656	2,723

#### E.5.2 ESTIMATION OF TRAFFIC-RELATED CARBON MONOXIDE CONCENTRATIONS

Traffic-related emissions of carbon monoxide were estimated using the CALINE4 dispersion modeling program for three intersections: the intersections between I-580 and Castro Street (Richmond Parkway); the intersections between I-580 and Marine Street; and the intersections between I-580 and Western Drive. Emission rates used in the CALINE4 model were obtained from the EMFAC7.1 emission rate modeling program. THE CALINE4 and EMFAC7.1 models were obtained from Caltrans. Carbon monoxide levels were only modeled for Alternative 2, because this alternative has the highest level of vehicle trips (15 percent more trips than Alternative 1 and more than twice as many trips as Alternative 3).

##### EMFAC7.1

The CALINE4 program requires an emission rate for each modeled road segment in an intersection. The EMFAC7.1 program provides emission rates as a function of the following parameters: vehicle fleet composition; percentage of cold starts; ambient temperature, and operating year. The vehicle fleet composition was obtained from the default values for the Bay Area embedded in the URBEMIS5 model. For both 2010 and 2020 the composition of the fleet is: light duty automobiles (LDA) 72.3 percent; light duty trucks (LDT) 16.3 percent; medium duty trucks (MDT) 5.4 percent; gasoline-fueled heavy duty trucks (HDG) 2.4 percent; diesel-fueled heavy duty trucks (HDD) 0.8 percent; and motorcycles (MCY) 2.8 percent. Emission factors were calculated for a worst-case ambient temperature of 40°F. The percentage of cold starts was initially set to 60 percent, which is the default percentage for modeling emissions in the BAAQMD CEQA Guidelines (BAAQMD 1999b). Sixty percent cold starts is considered a highly conservative value for modeling freeway interchanges. Most vehicles leave the cold start operating mode within less than five minutes of starting the vehicle. Using these inputs, EMFAC7.1 provided emission rates as a function of vehicle speeds.

##### CALINE4

The CALINE4 model was used with the graphical interface released by CALTRANS in June 1998 for CALINE4 version 1.30. The graphical interface requires entries in five categories: job parameters; link geometry; link activity, run conditions, and receptor geometry.

##### Job Parameters

The CALINE4 model was set to obtain worst case one-hour carbon monoxide concentrations. Model runs were made with both the rural and suburban default values for aerodynamic roughness coefficients, 10 and 100 cm respectively. The value of the roughness coefficient affected the modeled concentrations by

less than five percent. Results summarized below are for the suburban default value. The altitude above sea level of each interchange was obtained from USGS maps.

#### *Link Geometry*

X and Y coordinates were obtained for each road segment of the interchanges using USGS topographic maps.

#### *Link Activity*

Vehicles per hour for each road segment were obtained from the traffic predictions provided by Korve Engineering (Section 4.9) for 2010 and 2020. Emission rates were obtained from the EMFAC7.1 model and Appendix B of the *Transportation Project-Level Carbon Monoxide Protocol* (ITS 1997). Tables B.13 and B.14 were used to obtain average speeds for approaching and departing intersections as a function of cruising speed and vehicles per lane. The average speeds were then used to obtain the emission rate from the EMFAC7.1 output.

#### *Run Activity*

The default values for worst-case modeling in the CALINE4 program were used: wind speed of 1 meter per second, stability class of 7, and mixing height of 1,000 meters. The standard deviation for wind speed was set to 15 degrees and the ambient temperature was set to the worst-case value of 40°F for the City of Richmond. The ambient carbon monoxide concentration was obtained from the *BAAQMD CEQA Guidelines* (BAAQMD 1999b). The *BAAQMD CEQA Guidelines* give a one-hour ambient carbon monoxide concentration of 3 ppm for Richmond in 1992 and a rollback factor of 0.58 for 2010. Therefore, the ambient ozone concentration is 1.7 ppm for 2010. Because the *BAAQMD CEQA Guidelines* does not provide a rollback factor for 2020, the ambient carbon monoxide value was set to 1.7 for 2020. Wind direction was modeled from 0 to 360 degrees, using 10 degree increments.

#### *Receptor Coordinates*

Carbon monoxide concentrations were modeled for one-hour intervals at the intersections in the modeled highway interchanges with the highest vehicle per lane values. Receptors were located 50 feet from the roadway centerline. X and Y coordinates were obtained from USGS topographical maps.

#### *Summary of Modeled Carbon Monoxide Concentrations*

The table below summarizes the modeled concentrations for the three freeway interchanges. Models were run for one-hour concentrations. The eight-hour concentrations were calculated using the conservative persistence value of 0.7 recommended in the *BAAQMD CEQA Guidelines*. The concentrations in the table are for the year 2010. At the Western Avenue/I-580 interchange, concentrations were modeled at the intersection of Western Avenue with the off-ramp from westbound I-580 and the on-ramp to westbound I-580. At the Marine Street/I-580 interchange, concentrations were modeled at the intersection of the eastbound off-ramp from I-580 and Marine Street and at Marine street just north of I-580. At the Castro Street/I-580 interchange, concentrations were modeled at the intersection of Castro Street with the on- and off-ramps for westbound 580 and Chevron Way, and at the intersection of Castro Street and Tewksbury Avenue.

Concentrations were first calculated using the highly conservative value of 60 percent for cold starts. Because vehicles stop operating in the cold start mode within less than five minutes, the percentage of vehicles operating in cold start mode at the freeway interchanges is actually likely to be less than 10 percent. For the one intersection at which the concentration modeled using 60 percent cold starts exceeded the eight-hour standard of 9 ppm, the model was re-run using a cold start percentage of 40 percent, which is still conservative for a major intersection with a freeway. The re-calculated value meets the eight-hour standard.

Worst-Case Carbon Monoxide Concentrations Modeled Using CALINE 4					
Intersection	Wind Direction (Degrees)	60 Percent Cold Starts		40 Percent Cold Starts	
		One-hour (ppm)	Eight-Hour (ppm)	One-hour (ppm)	Eight-Hour (ppm)
I-580/Western	310	3.7	2.6	NC	NC
I-580/Marine	340	10.7	7.5	NC	NC
I-580 Castro	40	14.3	10.0	11.5	8.1
State Standard		20	9	20	9

Notes:

Wind direction: Wind from the North is 0 degrees and wind from the West is 270 degrees.

NC = Not Calculated. Values not calculated for 40 percent cold starts because the values for 60 percent cold starts met the one-hour and eight-hour standards.

#### *2010 Versus 2020 Carbon Monoxide Levels*

Carbon monoxide values were calculated for 2020 at the I-580/Castro street interchange. Based on the traffic estimates provided by Korve Engineering (Section 4.9), traffic will levels will increase by approximately 10 percent between 2010 and 2020, for each of the three reuse alternatives. The EMFAC7.1 program predicts that carbon monoxide emission rates will decrease by more than 20 percent between 2010 and 2020. Since the BAAQMD CEQA Guidelines do not provide a rollback factor for 2020, the ambient carbon monoxide concentration for 2020 was conservatively set equal to the ambient value of 1.7 ppm for 2010.

Worst-Case Carbon Monoxide Concentrations Modeled Using CALINE4 for the Intersection of I-580 and Castro Street (60 percent cold starts)				
Wind Direction (Degrees)	2010		2020	
	One-Hour (ppm)	Eight-Hour (ppm)	One-Hour (ppm)	Eight-Hour (ppm)
40	14.3	10.0	11.6	8.1
State Standard	20	9	20	9

The decrease in emission rates results in lower carbon monoxide concentrations in 2020 than in 2010, despite the slightly higher traffic volumes in the latter year.

#### *Conclusion*

Based on CALINE4 modeling, traffic associated with the three reuse alternatives will not result in local exceedances of carbon monoxide standards.

**TABLE E.5-1**  
**SUMMARY OF AVERAGE WEEKDAY TRAFFIC-RELATED EMISSIONS FROM**  
**VEHICLE TRAVEL ASSOCIATED WITH ALTERNATIVE 1**

LAND USE	DAILY TRIP RATE	SIZE	DAILY VEHICLE TRIPS	ROG (LB./DAY)	NOx (LB./DAY)	PM10 (LB./DAY)	SUMMER CO (LB./DAY)	WINTER CO (LB./DAY)
Commercial (Wine shop, Retail)	40.67/KSF	15 KSF	610	3.53	5.60	1.06	34.20	59.43
Commercial (Restaurant)	89.95/KSF	15 KSF	1,349	7.82	12.40	2.35	75.65	131.44
Commercial (Miscellaneous commercial)	12.67/KSF	145.97 KSF	1,850	10.72	16.99	3.22	103.72	180.20
Industrial	6.97/KSF	93.24 KSF	650	3.76	5.97	1.13	36.44	63.31
Residential (Single Family / Live-Work)	9.57/Unit	510 Units	4,881	33.58	44.84	8.51	273.65	475.45
Residential (Multi-Family)	5.86/Unit	220 Units	1,289	9.75	11.84	2.25	72.28	125.59
Open Space/Recreation	2.28/Acre	191.3 Acres	436	2.53	4.01	0.76	24.45	42.49
<b>Total</b>			<b>11,069</b>	<b>71.70</b>	<b>101.66</b>	<b>19.28</b>	<b>620.40</b>	<b>1,077.89</b>
Road dust PM10						<b>131.23</b>		
<b>Total PM10</b>						<b>150.51</b>		

Source: U.S. Navy 1998d.

**Notes:**

ROG Reactive Organic Gases  
 NOx Nitrogen Oxides  
 PM10 Inhalable Particulate Matter  
 CO Carbon Monoxide  
 KSF 1,000 square feet

Road dust PM10 calculated as (total daily vehicle trips) x (avg. trip length) x (dust generation rate from BAAQMD CEQA Guidelines)  
 = (total daily vehicle trips) x (7.8 miles) x (0.00152 pounds per mile)

Average emissions modeled using the URBEMIS5 Computer Program. Per BAAQMD CEQA Guidelines, emissions were modeled using fleet mix default values in URBEMIS5 for the San Francisco Bay Area, the mean maximum summer temperature for ROG and NOx (75 °F in Richmond), the mean minimum winter temperature (40 °F in Richmond) for winter carbon monoxide, average trip length of 7.8 miles from Table 9 of the BAAQMD CEQA Guidelines (Alameda and Contra Costa Counties in 2010), 40% hot starts, average trip speed of 30 mph, and San Francisco Bay Area default values for Percent Trips.

**TABLE E.5-2**  
**SUMMARY OF AVERAGE WEEKDAY TRAFFIC-RELATED EMISSIONS FROM**  
**VEHICLE TRAVEL ASSOCIATED WITH ALTERNATIVE 2**

LAND USE	DAILY TRIP RATE	SIZE	DAILY VEHICLE TRIPS	ROG (LB./DAY)	NOx (LB./DAY)	PM10 (LB./DAY)	SUMMER CO (LB./DAY)	WINTER CO (LB./DAY)
Commercial (Wine shop, Retail)	40.67/KSF	15 KSF	610	3.53	5.60	1.06	34.20	59.43
Commercial (Restaurant)	89.95/KSF	15 KSF	1,349	7.82	12.40	2.35	75.65	131.44
Commercial (Miscellaneous commercial)	12.67/KSF	145.97 KSF	1,850	10.72	16.99	3.22	103.72	180.20
Industrial	6.97/KSF	1,237 KSF	8,622	49.97	79.21	15.02	483.40	839.87
Open Space/Recreation	2.28/Acre	197.3 Acres	450	2.60	4.13	0.78	25.22	43.82
<b>Total</b>			<b>12,884</b>	<b>74.65</b>	<b>118.34</b>	<b>22.45</b>	<b>722.20</b>	<b>1,254.75</b>
Road dust PM10						<b>152.72</b>		
<b>Total PM10</b>						<b>175.17</b>		

Source: U.S. Navy 1998d.

**Notes:**

ROG Reactive Organic Gases  
 NOx Nitrogen Oxides  
 PM10 Inhalable Particulate Matter  
 CO Carbon Monoxide  
 KSF 1,000 square feet

Road dust PM10 calculated as (total daily vehicle trips) × (avg. trip length) × (dust generation rate from BAAQMD CEQA Guidelines)  
 = (total daily vehicle trips) × (7.8 miles) × (0.00152 pounds per mile)

Average emissions modeled using the URBEMIS5 Computer Program. Per BAAQMD CEQA Guidelines, emissions were modeled using fleet mix default values in URBEMIS5 for the San Francisco Bay Area, the mean maximum summer temperature for ROG and NOx (75 °F in Richmond), the mean minimum winter temperature (40 °F in Richmond) for winter carbon monoxide, average trip length of 7.8 miles from Table 9 of the BAAQMD CEQA Guidelines (Alameda and Contra Costa Counties in 2010), 40% hot starts, average trip speed of 30 mph, and San Francisco Bay Area default values for Percent Trips.

TABLE E.5-3  
SUMMARY OF AVERAGE WEEKDAY TRAFFIC-RELATED EMISSIONS FROM  
VEHICLE TRAVEL ASSOCIATED WITH ALTERNATIVE 3

LAND USE	DAILY TRIP RATE	SIZE	DAILY VEHICLE TRIPS	ROG (LB./DAY)	NOx (LB./DAY)	PM 10 (LB./DAY)	SUMMER CO (LB./DAY)	WINTER CO (LB./DAY)
Commercial (Wine shop, Retail)	40.67/KSF	15 KSF	610	3.53	5.60	1.06	34.20	59.43
Commercial (Restaurant)	89.95/KSF	15 KSF	1,349	7.82	12.40	2.35	75.65	131.44
Commercial (Miscellaneous commercial)	12.67/KSF	130.90 KSF	1,659	9.61	15.24	2.89	92.99	161.56
Industrial	6.97/KSF	209.43 KSF	1,460	8.46	13.41	2.54	81.85	142.20
Open Space/Recreation	2.28/Acre	246.7 Acres	562	3.26	5.17	0.98	31.54	54.79
<b>Total</b>			<b>5,644</b>	<b>32.69</b>	<b>51.82</b>	<b>9.83</b>	<b>316.23</b>	<b>549.42</b>
Road dust PM10						<b>66.92</b>		
<b>Total PM10</b>						<b>76.75</b>		

Source: U.S. Navy 1998d.

**Notes:**

ROG Reactive Organic Gases  
 NOx Nitrogen Oxides  
 PM10 Inhalable Particulate Matter  
 CO Carbon Monoxide  
 KSF 1,000 square feet

Road dust PM10 calculated as (total daily vehicle trips) × (avg. trip length) × (dust generation rate from BAAQMD CEQA Guidelines)  
 = (total daily vehicle trips) × (7.8 miles) × (0.00152 pounds per mile)

Average emissions modeled using the URBEMIS5 Computer Program. Per BAAQMD CEQA Guidelines, emissions were modeled using fleet mix default values in URBEMIS5 for the San Francisco Bay Area, the mean maximum summer temperature for ROG and NOx (75 °F in Richmond), the mean minimum winter temperature (40 °F in Richmond) for winter carbon monoxide, average trip length of 7.8 miles from Table 9 of the BAAQMD CEQA Guidelines (Alameda and Contra Costa Counties in 2010), 40% hot starts, average trip speed of 30 mph, and San Francisco Bay Area default values for Percent Trips.

*This page intentionally left blank.*



# DEPARTMENT OF THE NAVY

ENGINEERING FIELD ACTIVITY, WEST  
NAVAL FACILITIES ENGINEERING COMMAND  
900 COMMODORE DRIVE  
SAN BRUNO, CALIFORNIA 94068-5006

Appendix E.5—Air Quality

IN REPLY REFER TO:

## Record of Non-Applicability

### Disposal and Reuse of Fleet and Industrial Supply Center, Naval Fuel Depot Point Molate

Pursuant to Section 176(c) of the Clean Air Act, 42 U.S.C. § 7506(c), the General Conformity Rule, 40 C.F.R. Part 93, Subpart B, and the Chief of Naval Operations Interim Guidance on Compliance with the Clean Air Act General Conformity Rule, March 8, 1995, the Department of the Navy has determined that the action to dispose of and reuse the Fleet and Industrial Supply Center, Naval Fuel Depot, Point Molate, is exempt from the requirement for a conformity determination. This finding is based on the following exemptions as stated in 40 C.F.R. § 93.153(c)(2):

(xi) The granting of leases, licenses such as for exports and trade, permits, and easements where activities conducted will be similar in scope and operation to activities currently being conducted.

(xiv) Transfers of ownership, interests, and titles in land, facilities, and real and personal properties, regardless of the form or method of transfer.

(xix) Actions (or portions thereof) associated with transfers of land, facilities, title, and real properties through an enforceable contract or lease agreement where the delivery of the deed is required to occur promptly after a specific, reasonable condition is met, such as promptly after the land is certified as meeting the requirements of CERCLA, and where the Federal agency does not retain continuing authority to control emissions associated with the land, facilities, title, or real properties.

(xx) Transfers of real property, including land, facilities, and related personal property from a Federal entity to another Federal entity and assignments of real property, including land, facilities, and related personal property from a Federal entity to another Federal entity for subsequent deeding to eligible applicants.

The Environmental Protection Agency's preamble to the General Conformity Rule explained the exemption for Federal land transfers as follows: "Under the exclusive definition of indirect emissions, Federal land transfers are unlikely to be covered since the Federal agency will not maintain authority over reuse activities on that land. Consequently, Federal land transfers are included in the regulatory list of actions that will not exceed the de minimis levels and thus are exempt from the final conformity rules." 58 Fed. Reg. 63231 (1993).

Based on the foregoing regulations and policies, I have determined that the Navy's actions to dispose of and reuse the Fleet and Industrial Supply Center, Naval Fuel Depot, Point Molate is exempt from the requirement for a conformity determination.

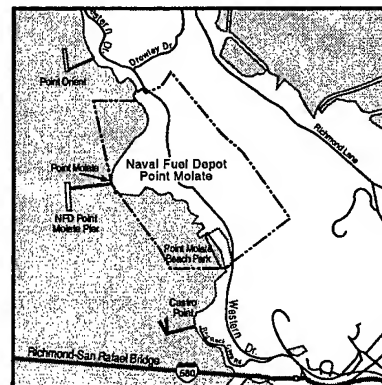
  
ERNEST R. HUNTER

6/7/99  
DATE



*This page intentionally left blank.*

## E.6 Surplus Determination



**Community Redevelopment Authority and Available Surplus Buildings and Land at Military Installations Designated for Closure: Naval Reserve Center, Sheboygan, WI**

**SUMMARY:** This Notice provides information regarding the redevelopment authority that has been established to plan the reuse of the Naval Reserve Center, Sheboygan, WI, and the surplus property that is located at that base closure site.

**FOR FURTHER INFORMATION CONTACT:** John J. Kane, Director, Department of the Navy, Real Estate Operations, Naval Facilities Engineering Command, 200 Stovall Street, Alexandria, VA 22332-2300, telephone (703) 325-0474, or Mr. E.R. Nelson, Director, Real Estate Division, Southern Division, Naval Facilities Engineering Command, North Charleston, SC 29419-9010, telephone (803) 820-7494. For more detailed information regarding particular properties identified in this Notice (i.e., acreage, floor plans, sanitary facilities, exact street address, etc.), contact Mr. Steve Campbell at the above North Charleston address and at telephone (803) 820-7492.

**SUPPLEMENTARY INFORMATION:** In 1995, the Naval Reserve Center, Sheboygan, WI, was designated for closure pursuant to the Defense Base Closure and Realignment Act of 1990, Public Law 101-510, as amended. Pursuant to this designation, on 28 September 1995, land and facilities at this installation were declared excess to the Department of the Navy and available for use by other federal agencies. No interest has been expressed.

**Notice of Surplus Property**

Pursuant to paragraph (7)(B) of Section 2905(b) of the Defense Base Closure and Realignment Act of 1990, as amended by the Base Closure Community Redevelopment and Homeless Assistance Act of 1994 (Pub. L. 103-421), the following information regarding the redevelopment authority and surplus property at the Naval Reserve Center, Sheboygan, WI is published in the Federal Register:

**Redevelopment Authority**

The redevelopment authority for the Naval Reserve Center, Sheboygan, WI for purposes of implementing the provisions of the Defense Base Closure and Realignment Act of 1990, as amended, is the City of Sheboygan, WI. The Director of City Development is Mr. Robert Peterson, 807 Center Avenue, Sheboygan, WI 53081-4414, telephone (414) 459-3377.

**Surplus Property Descriptions**

The following is a listing of the land and facilities at the Naval Reserve Center, Sheboygan, WI that are surplus to the federal government.

**Land**

Approximately 1.20 acres of improved fee simple land at the Naval Reserve Center, Sheboygan, WI. In general, all areas will be available upon the closure of the Center, anticipated for September 1996.

**Buildings**

The following is a summary of the facilities located on the above described land which will also be available when the Center closes in September 1996, unless otherwise indicated. Property numbers are available on request.

—Office/administration building.

Comments: Approx. 14,200 square feet.

—Paved areas. Comments: Includes

roads, sidewalks, and parking areas.

**Expressions of Interest**

Pursuant to paragraph 7(C) of Section 2905(b) of the Defense Base Closure and Realignment Act of 1990, as amended by the Base Closure Community Redevelopment and Homeless Assistance Act of 1994, state and local governments, representatives of the homeless, and other interested parties located in the vicinity of the Naval Reserve Center, Sheboygan, Wisconsin shall submit to the City of Sheboygan a notice of interest, of such governments, representatives and parties in the above described surplus property, or any portion thereof. A notice of interest shall describe the need of the government, representative, or party concerned for the desired surplus property. Pursuant to paragraphs 7(C) of said Section 2905(b), the City of Sheboygan shall assist interested parties in evaluating the surplus property for the intended use and publish in a newspaper of general circulation in Wisconsin the date by which expressions of interest must be submitted.

Dated: January 19, 1996.

M.A. Waters,  
LCDR, JAGC, USN, Federal Register Liaison Officer.

[FR Doc. 96-1663 Filed 1-29-96; 8:45 am]

BILLING CODE 3810-FF-P

**Community Redevelopment Authority and Available Surplus Buildings and Land at Military Installations Designated for Closure: Point Molate Fuel Department, Richmond, CA**

**SUMMARY:** This Notice provides information regarding the redevelopment authority that has been established to plan the reuse of the Point Molate Fuel Department, located in Richmond, Contra Costa County, California, and the surplus property that is located at that base closure site.

**FOR FURTHER INFORMATION CONTACT:** John J. Kane, Director, Department of the Navy, Real Estate Operations, Naval Facilities Engineering Command, 200 Stovall Street, Alexandria, VA 22332-2300, telephone (703) 325-0474, or Mr. William R. Carsillo, Real Estate Center, Engineering Field Activity West, 900 Commodore Drive, San Bruno, CA 94066-5006, telephone (415) 244-3815, facsimile (415) 244-3803. For more detailed information regarding particular properties identified in this Notice (i.e., acreage, floor plans, sanitary facilities, exact street address, etc.), contact Lieutenant Commander Rich Iannicca, Base Closure Officer, Fleet and Industrial Supply Center Oakland, 250 Executive Way, Oakland, CA 94625-5000, telephone (510) 302-5377, facsimile (510) 302-5381.

**SUPPLEMENTARY INFORMATION:** In 1995, Point Molate Fuel Department, Richmond, CA, was designated for closure pursuant to the Defense Base Closure and Realignment Act of 1990, Public Law 101-510, as amended. Pursuant to this designation, on 28 September 1995, land and facilities at this installation were declared excess to the Department of Navy and made available for use by other federal public agencies. No interest has been expressed.

**Notice of Surplus Property**

Pursuant to paragraph (7)(B) of section 2905(b) of the Defense Base Closure and Realignment Act of 1990, as amended by the Base Closure Community Redevelopment and Homeless Assistance Act of 1994, the following information regarding the redevelopment authority for and surplus property at Point Molate Fuel Department, Richmond, CA is published in the Federal Register:

**Redevelopment Authority**

The redevelopment authority for Point Molate Fuel Department, Richmond, CA for purposes of implementing the provisions of the Defense Base Closure and Realignment Act of 1990, as amended, is the LRA for

Point Molate. Day to day operations of the Commission are handled by a professional staff. The address of the redevelopment authority: LRA for Point Molate, 2600 Barret Avenue, Richmond, California 94804, telephone (510) 620-6952.

#### Surplus Property Descriptions

The following is a listing of the land and facilities at Point Molate Fuel Department, Richmond, CA, that are surplus to the Federal government.

#### Land

Approximately 413 acres of improved and unimproved fee simple land at the Point Molate Fuel Department, located in the City of Richmond, Contra Costa County, California. In general, all areas will be available upon the closure of the facility, anticipated for 1998.

#### Buildings

The following is a summary of the facilities located on the above described land which will also be available when the facility closes in 1998, unless otherwise indicated. Property numbers are available on request.

- Petroleum product storage and distribution systems. 17 miles of aboveground and underground pipeline with associated facilities, and 23 above and below ground tanks with a total capacity of 1.1 million barrels.
- Piers and moorings. (3 structures.)
- Warehouse/storage. (9 structures). 336,308 square feet.
- Office/administration. (1 structure). 6,136 square feet.
- Fire station. (1 structure). 4,236 square feet.
- Housing. (29 single-family units). 32,928 square feet.
- Garages. (6 structures). 6,325 square feet.
- Heating plant. (1 structure). 2,255 square feet.
- Public works shops. (3 structures). 8,141 square feet.
- Laboratory. (1 structure). 8,900 square feet.
- Vehicle maintenance. (1 structure). 1,711 square feet.
- Utilities. Gas, electrical, water, telephone, sewer.
- Railroad. 4.3 miles of track.

#### Expressions of Interest

Pursuant to paragraph 7(C) of section 2905(b) of the Defense Base Closure and Realignment Act of 1990, as amended by the Base Closure Community Redevelopment and Homeless Assistance Act of 1994, State and local governments, representatives of the homeless, and other interested parties

located in the vicinity of the Point Molate Fuel Department, Richmond, CA, shall submit to the said redevelopment authority (LRA for Point Molate) a notice of interest, of such governments, representatives and parties in the above described surplus property, or any portion thereof. A notice of interest shall describe the need of the government, representative, or party concerned for the desired surplus property. Pursuant to paragraphs 7(C) of said Section 2905(b), the redevelopment authority shall assist interested parties in evaluating the surplus property for the intended use and publish in a newspaper of general circulation in Richmond, California the date by which expressions of interest must be submitted.

Dated: January 19, 1996.

M.A. Waters,

LCDR, JAGC, USN, Federal Register Liaison Officer.

[FR Doc. 96-1661 Filed 1-29-96; 8:45 am]

BILLING CODE 3810-FF-P

#### Notice of Public Hearing for the Draft Environmental Impact Statement for the Disposal and Reuse of Naval Base Philadelphia, Philadelphia, PA

**SUMMARY:** Pursuant to Council on Environmental Quality regulations (40 CFR parts 1500-1508) implementing procedural provisions of the National Environmental Policy Act, the Department of the Navy has prepared and filed with the U.S. Environmental Protection Agency the Draft Environmental Impact Statement (DEIS) for the Disposal and Reuse of Naval Base Philadelphia, Philadelphia, PA. This action is being conducted in accordance with the Defense Base Closure and Realignment Act of 1990 (Pub. L. 101-510).

The DEIS has been distributed to various federal, state, and local agencies, elected officials, special interest groups, the media, and the South Philadelphia Branch of the Free Library of Philadelphia; 1700 South Broad Street, Philadelphia. A limited number of single copies are available at the address listed at the end of this notice for public review and comment. A public hearing to inform the public of the DEIS findings and to solicit comments will be held on February 15, 1996, beginning at 7:30 p.m., at the South Philadelphia Community Center, 2600 South Broad Street (corner of Broad St. and Oregon Ave.), Philadelphia, Pennsylvania. Please call the point of contact listed below or the Community Center at (610) 467-1500 in

the case of inclement weather to confirm that the meeting will take place.

Federal, state, local agencies and interested parties are invited and urged to be present or represented at the hearing. Oral statements will be heard and transcribed by a stenographer; however, to ensure accuracy of the record, all statements should be submitted in writing. All statements, both oral and written, will become part of the public record on this study. Equal weight will be given to both oral and written statements.

**ADDRESSES:** Written comments on the DEIS should be mailed to the address noted below, and must be postmarked by March 4, 1996 to become part of the official record. Additional information concerning this notice may be obtained by contacting Ms. Tina Deininger, (Code 202), Northern Division, Naval Facilities Engineering Command, 10 Industrial Highway, MSC 82, Lester, PA, 19113, telephone (610) 595-0759, facsimile (610) 595-0778.

Dated: January 25, 1996.

M.D. Schetzle,

LT, JAGC, USNR, Alternate Federal Register Liaison Officer.

[FR Doc. 96-1669 Filed 1-29-96; 8:45 am]

BILLING CODE 3810-FF-M

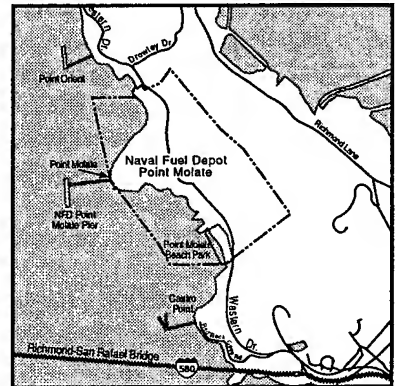
#### Notice of Intent To Prepare an Environmental Impact Statement on General Development at the Acoustic Research Detachment, Bayview, ID

**SUMMARY:** Pursuant to section 102(2)(C) of the National Environmental Policy Act of 1969, as implemented by the Council on Environmental Quality regulations (40 CFR parts 1500-1508), the Department of the Navy announces its intent to prepare an Environmental Impact Statement (EIS) to evaluate the environmental effects of implementing a plan for General Development at the Naval Surface Warfare Center, Acoustic Research Detachment (ARD) in Bayview, Idaho. Bayview is situated on Scenic Bay in the southern end of Lake Pend Oreille in Kootenai County, Idaho. Bayview is approximately 70 miles northeast of Spokane, Washington, 35 miles north of Coeur D'Alene, Idaho, and approximately 75 miles south of the Canadian border.

The mission of the ARD is to support underwater acoustic research experiments. Lake Pend Oreille provides certain characteristics that provide an ideal acoustic and water quality environment for research experiments. The ARD operates facilities ashore and in Lake Pend Oreille. The shore facilities are generally

---

## F Restoration Advisory Board and Community Relations Plan Summary



---

## **APPENDIX F: RESTORATION ADVISORY BOARD AND COMMUNITY RELATIONS PLAN SUMMARY**

---

### **CONTENTS**

**Page**

#### **Appendix F – Restoration Advisory Board and Community Relations Plan Summary**

Restoration Advisory Board ..... F-1

Community Relations Plan Summary ..... F-3

**POINT MOLATE  
RESTORATION ADVISORY BOARD**

Bruce Beyaert  
Richmond, CA

Henry Clark  
Richmond, CA

Elizabeth Dunn  
Richmond, CA

Lucretia Edwards  
Richmond, CA

Sarah Eeles  
Richmond, CA

Gaye Eisenlord  
El Sobrante, CA

Bunny Ford  
El Cerrito, CA

Richard Frisbie  
El Cerrito, CA

Sharon Fuller  
Richmond, CA

Don Gosney  
Richmond, CA

Arnie Kasendorf  
Richmond, CA

Jill Kiernan

Don Kinkela  
Richmond, CA

Stephen Linsley  
El Cerrito, CA

Nagaraja Rao  
Richmond, CA

Jean Siri  
El Cerrito, CA

Elinor Strauss  
Richmond, CA

Terry Swartz  
Richmond, CA

Eileen Whitty  
El Sobrante, CA

**NAVY**

---

Marianna Potaka  
Navy Chair, BRAC Env. Coordinator  
Southwest Division  
NAVFACENGCOM  
1320 Columbia Street, Suite 1100  
San Diego, CA 92101

Michelle Gallice Sondrup  
Remedial Project Manager  
Southwest Division  
NAVFACENGCOM  
1320 Columbia Street, Suite 1100  
San Diego, CA 92101

**REGULATORY AGENCY**

---

Linda Dorn  
Regional Water Quality Control Board  
1515 Clay Street, Suite 1400  
Oakland, CA 94612

*This page intentionally left blank.*



## **COMMUNITY RELATIONS PLAN (summary)**

*for Naval Fuel Depot Point Molate, Richmond, California*

---

Prepared for Department of the Navy, Engineering Field Activity West

Prepared by PRC Environmental Management, Inc.

January 23, 1996

### **1. Introduction**

The Community Relations Plan (CRP) for NFD Point Molate was developed and finalized in January of 1996. The purpose of the CRP is to outline community relations activities surrounding environmental investigation and cleanup as part of the Navy Installation Restoration Program (IRP). In order to address CERCLA-regulated substances, the IRP is designed to identify and investigate potential hazardous waste sites at military installations. The activities for the IRP are conducted by the Navy in conjunction with the California Department of Toxic Substances Control (DTSC) and Regional Water Quality Control Board.

The Community Relations Program has three objectives:

- to provide information to the community regarding sites that are under investigation
- to provide and maintain open communication with the surrounding community
- to involve the community in the decision-making process

The CRP was developed based on direction from DTSC and U.S. Environmental Protection Agency, discussions with Navy personnel, supporting documents from past and current investigations, and interviews with 25 various members of the community. The interviews were conducted with local officials, business representatives, community groups, and residents. The CRP has determined that, based on the community interviews, the general public is uninformed about and uninterested in environmental investigation and cleanup activities at NFD Point Molate.

The CRP recommends that the community relations program focus on the following:

- frequent communication with the city officials who were most concerned about future use of the site
- job shadowing, career days, and contracting opportunities for the local community

### **2. The Installation Restoration Program**

The Navy conducts environmental activities under the IRP as follows:

- Preliminary Assessment (PA) – data collection and review for a known or suspected hazardous waste site or release.
- Site Inspection (SI) – as a follow up to the PA, collection of more extensive information about the site.
- Remedial Investigation (RI) – data collection to characterize the contamination and possible resulting human health issues.
- Feasibility Study (FS) – establishes criteria for cleaning up the site, including cleanup alternatives and analysis of technology and cost.

At the time of document completion, all four Installation Restoration (IR) sites at NFD Point Molate were undergoing RIs. Following the RIs, the environmental activities were to prepare the following:

- Draft Remedial Action Plan (DRAP) – proposes a preferred cleanup alternative from the FS.
- Final Remedial Action Plan (Final RAP) – describes investigative activities and the selected cleanup alternative.
- Remedial Design (RD) and Remedial Action (RA) – development of engineering specifications for site cleanup (RD) and the actual site cleanup (RA).

## COMMUNITY RELATIONS PLAN (summary)

*continued*

### 3. Facility and Site Descriptions

The Navy acquired NFD Point Molate in 1941, installing 24 underground storage tanks and 9 above ground storage tanks between 1942 and 1979. Leaks and spills from these tanks and associated piping are believed responsible for much of the contamination at NFD Point Molate. The property contains the following four IR sites (Figure 3.13-1, this document):

- IR-01 – Waste Disposal Area, previously referred to as a landfill, containing mixed oily waste and construction debris.
- IR-02 – Sandblast Grit Disposal Areas, consisting of four local areas that contain elevated levels of metals.
- IR-03 – Treatment Ponds Area, which was constructed on top of a former oil pond. Several fuel types were found floating on the water table near the Treatment Ponds and have traveled into shoreline sediments.
- IR-04 – Shoreline Areas, which include groundwater contamination, beach contaminants, and floating fuel plumes.

### 4. Community Profile

Historically, community involvement in NFD Point Molate has been minimal. What interest has been expressed largely surrounds the future use of the property's Winehaven Building, which is listed in the National Register of Historic Places. NFD Point Molate has had little involvement with the community regarding environmental activities.

In the City of Richmond, the community concerns tend towards crime, unemployment, and education. In general, community interest in NFD Point Molate is low. Most people interviewed were not aware of environmental problems at NFD Point Molate; the environmental concerns were more focused on the Chevron refinery operations. City officials, while more aware of the environmental concerns than the general public, were still more concerned about other issues within the City. Specific concerns have been organized into four groups:

1. *History and Community Awareness.* The surrounding community is unfamiliar with NFD Point Molate operations. Most people interviewed felt that the facility should be cleaned up to permit unrestricted use after closure.
2. *Environmental Concerns.* The predominant community concern is health, specifically with regard to air emissions from NFD Point Molate's neighboring facilities.
3. *Public Involvement and Information Needed.* Most of those interviewed felt that the best way to disseminate information about NFD Point Molate to the public was through newsletters and fact sheets. Few felt that special community meetings would be worthwhile, although regular briefings at Richmond City Council meetings were recommended. The Richmond Public Library and Richmond City Hall were suggested as information repositories for NFD Point Molate. Also recommended were public announcements and press releases in several local newspapers and radio and television stations.
4. *Government Credibility and Involvement.* The community had varying impressions of federal, state, and county government officials, although local and Navy officials were generally well-received. None of the community representatives interviewed had received specific inquiries regarding environmental concerns at NFD Point Molate.

## COMMUNITY RELATIONS PLAN (summary)

---

*continued*

### 5. Community Relations Program

The formal community relations program at NFD Point Molate consists of fact sheets; an information repository and administrative record; a public meeting at the proposed plan state; and routine contact with city officials and interest groups. The following outlines the objectives of the CRP:

1. Provide the community with timely and accurate information
  - *Create a mailing list.* For distribution of informational materials to residents, interested parties, elected officials, civic organizations, public interest groups, agency representatives, and news media.
  - *Establish information repositories.* House pertinent information, such as technical reports, at the Richmond Public Library and City Hall.
  - *Establish an administrative record.* This is a formal record containing all documents used in the remedial decision-making process for NFD Point Molate. This information is to be kept in the information repositories.
  - *Develop public notices.* This task is performed to keep the community informed of site activities.
  - *Develop fact sheets.* These are to be distributed to the public at key milestones in the investigation and cleanup process.
2. Provide and maintain an avenue for two-way communication
  - *Establish and maintain a Restoration Advisory Board (RAB).* The RAB is to meet as needed to provide an open forum for technical aspects of the IRP.
  - *Participate in community meetings.* Participate in agenda items regarding NFD Point Molate at various community meetings already occurring in the area.
  - *Brief key community members and public officials.* Establish regular contact between NFD Point Molate representatives and key community members and public officials.
  - *Conduct community interviews.* Conduct future interviews with the community to monitor possibly increasing or changing public concerns.
  - *Revise community relations plan.* Incorporate new information surrounding community concerns as needed.
3. Encourage community involvement in the decision-making process
  - *Conduct public meetings.* Hold a formal public meeting at key milestones to provide information and receive comment from the community.
  - *Hold public comment periods.* Formal public comment periods will provide a forum for both written and verbal comments regarding major documents related to the NFD Point Molate environmental effort.
  - *Prepare a responsiveness summary.* After each comment period, a responsiveness summary will be prepared to address community questions and concerns. The summaries will be distributed to the RAB and information repositories.

*This page intentionally left blank.*